

Notice: Use this form to request a **written response (on agency letterhead)** from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

Definitions

"Property" refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.

"Liability Clarification" refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

"Technical Assistance" refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

"Post-closure modification" refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

Select the Correct Form

This form should be used to request the following from the DNR:

- Technical Assistance
- Liability Clarification
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

Do not use this form if one of the following applies:

- Request for an **off-site liability exemption or clarification** for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the **Lender Liability Exemption**, s 292.21, Wis. Stats., **if no response or review by DNR is requested**. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an **exemption to develop on a historic fill site** or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- **Request for closure** for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure - GIS Registry Form 4400-202.

All forms, publications and additional information are available on the internet at: dnr.wi.gov/topic/Brownfields/Pubs.html.

Instructions

1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program **and** the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located. See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

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Section 1. Contact and Recipient Information

Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name Bieno	First David	MI	Organization/ Business Name Portage Cleaners, Inc.
Mailing Address 104 E. Wisconsin St.			City Portage
			State WI
			ZIP Code 53901
Phone # (include area code) (608) 617-6973	Fax # (include area code)	Email dbieno@portagecleaner.net	

The requester listed above: (select all that apply)

- Is currently the owner
- Is currently renting or leasing the Property
- Is a lender with a mortgagee interest in the Property
- Other. Explain the status of the Property with respect to the applicant:
- Is considering selling the Property
- Is considering acquiring the Property

Contact Information (to be contacted with questions about this request)

Select if same as requester

Contact Last Name Hoverman	First Rob	MI	Organization/ Business Name EnviroForensics, LLC
Mailing Address N16 W23390 Stone Ridge Dr. Suite G			City Waukesha
			State WI
			ZIP Code 53188
Phone # (include area code) (262) 510-0612	Fax # (include area code)	Email rhoverman@enviroforensics.com	

Environmental Consultant (if applicable)

Contact Last Name Hoverman	First Rob	MI	Organization/ Business Name EnviroForensics, LLC
Mailing Address N16 W23390 Stone Ridge Dr. Suite G			City Waukesha
			State WI
			ZIP Code 53188
Phone # (include area code) (262) 510-0612	Fax # (include area code)	Email rhoverman@enviroforensics.com	

Attorney (if applicable)

Contact Last Name	First	MI	Organization/ Business Name
Mailing Address			City
			State
			ZIP Code
Phone # (include area code)	Fax # (include area code)	Email	

Property Owner (if different from requester)

Contact Last Name	First	MI	Organization/ Business Name
Mailing Address			City
			State
			ZIP Code
Phone # (include area code)	Fax # (include area code)	Email	

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Section 2. Property Information

Property Name Portage Cleaners Inc.		FID No. (if known) 111043790	
BRRTS No. (if known) 02-11-512824	Parcel Identification Number 11271-1248		
Street Address 104 E. Wisconsin St	City Portage	State WI	ZIP Code 53901
County Columbia	Municipality where the Property is located <input checked="" type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village of Portage	Property is composed of: <input type="radio"/> Single tax parcel <input type="radio"/> Multiple tax parcels	Property Size Acres 0

1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

No Yes

Date requested by: _____

Reason: _____

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

No. **Include the fee that is required for your request in Section 3, 4 or 5.**

Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:

Section 3. Technical Assistance or Post-Closure Modifications;

Section 4. Liability Clarification; or Section 5. Specialized Agreement.

Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: [Numbers in brackets are for WI DNR Use]

- No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - **Include a fee of \$350.** Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.
- Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of \$700.**
- Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of \$1050.**
- Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of \$1050.**
- Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of \$1050.**
- Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of \$1050.**
- Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of \$350**
- Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of \$425.**
- Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of \$425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

- Schedule a Technical Assistance Meeting - **Include a fee of \$700.**
- Hazardous Waste Determination - **Include a fee of \$700.**
- Other Technical Assistance - **Include a fee of \$700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

- Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of \$1050, and:**
 - Include a fee of \$300 for sites with residual soil contamination; and
 - Include a fee of \$350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

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Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this form.

Clarification of local governmental unit (LGU) liability exemption at sites with: (select all that apply)

- hazardous substances spills - s. 292.11(9)(e), Wis. Stats. [649];
- Perceived environmental contamination - [649];
- hazardous waste - s. 292.24 (2), Wis. Stats. [649]; and/or
- solid waste - s. 292.23 (2), Wis. Stats. [649].

❖ Include a fee of \$700, a summary of the environmental liability clarification being requested, and the following:

- (1) clear supporting documentation showing the acquisition method used, and the steps followed under the appropriate state statute(s).
- (2) current and proposed ownership status of the Property;
- (3) date and means by which the Property was acquired by the LGU, where applicable;
- (4) a map and the ¼, ¼ section location of the Property;
- (5) summary of current uses of the Property;
- (6) intended or potential use(s) of the Property;
- (7) descriptions of other investigations that have taken place on the Property; and
- (8) (for solid waste clarifications) a summary of the license history of the facility.

Clarify the liability associated with a "closed" Property - s. 292.55, Wis. Stats. [682]

❖ Include a fee of \$700.

- Include a copy of any closure documents if a state agency other than DNR approved the closure.

Use this space or attach additional sheets to provide necessary information, explanations or specific questions to be answered by the DNR.

Section 5. Request for a Specialized Agreement

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: dnr.wi.gov/topic/Brownfields/Igu.html#tabx4.

Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]

❖ Include a fee of \$700, and the information listed below:

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description.

Agreement for assignment of tax foreclosure judgement - s. 75.106, Wis. Stats. [666]

❖ Include a fee of \$700, and the information listed below:

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description.

Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]

❖ Include a fee of \$1400, and the information listed below:

- (1) a draft schedule for remediation; and,
- (2) the name, mailing address, phone and email for each party to the agreement.

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Section 6. Other Information Submitted

Identify all materials that are included with this request.

Send both a paper copy of the signed form and all reports and supporting materials, and an electronic copy of the form and all reports, including Environmental Site Assessment Reports, and supporting materials on a compact disk.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

- Phase I Environmental Site Assessment Report - Date: _____
- Phase II Environmental Site Assessment Report - Date: _____
- Legal Description of Property (required for all liability requests and specialized agreements)
- Map of the Property (required for all liability requests and specialized agreements)

Analytical results of the following sampled media: Select all that apply and include date of collection.

Groundwater Soil Sediment Other medium - Describe: _____

Date of Collection: _____

- A copy of the closure letter and submittal materials
- Draft tax cancellation agreement
- Draft agreement for assignment of tax foreclosure judgment
- Other report(s) or information - Describe: _____

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

- Yes - Date (if known): _____
- No

Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at:
dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf.

Section 7. Certification by the Person who completed this form

- I am the person submitting this request (requester)
- I prepared this request for: Dave Bieno

Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.

Signature

Date Signed

Wisconsin Regional Manager

Title

6/4/2019

(262) 510-0612

Telephone Number (include area code)

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

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Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a [DNR regional brownfields specialist](#) with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.

DNR NORTHERN REGION

Attn: RR Program Assistant
Department of Natural Resources
223 E Steinfest Rd Antigo, WI 54409

DNR NORTHEAST REGION

Attn: RR Program Assistant
Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313

DNR SOUTH CENTRAL REGION

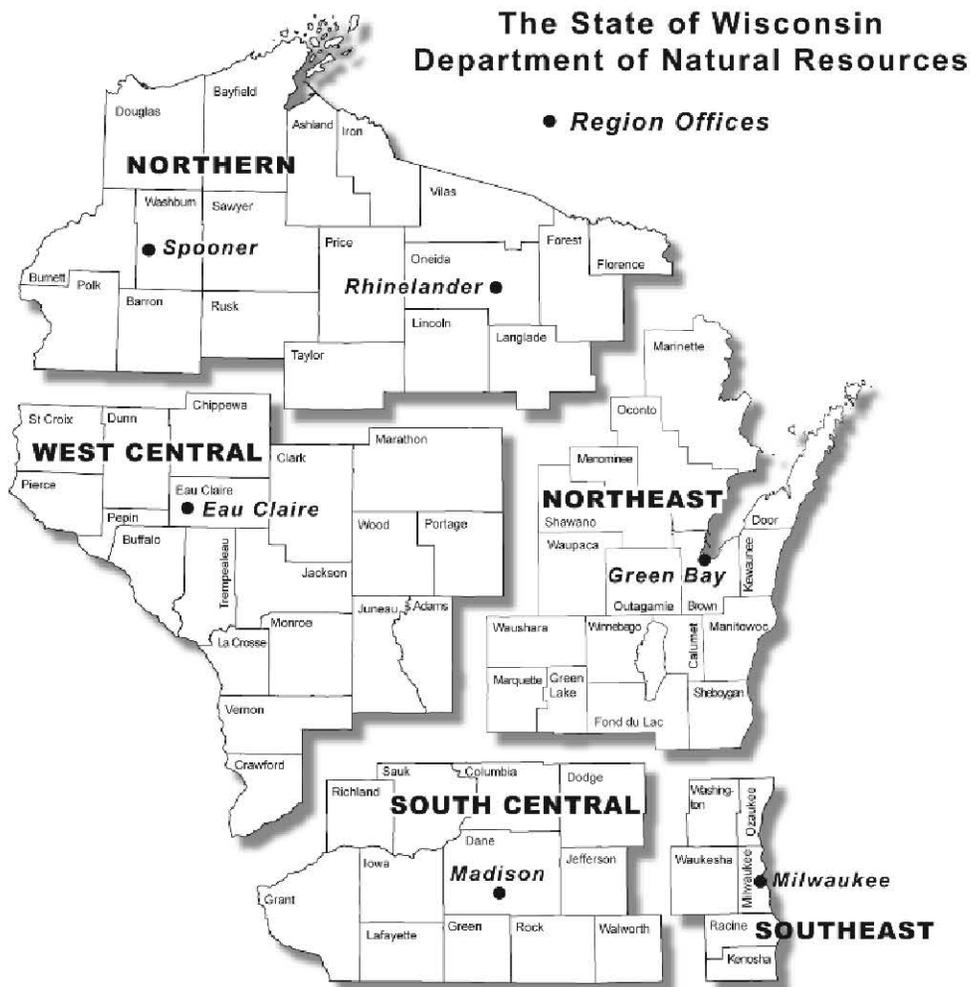
Attn: RR Program Assistant
Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg WI 53711

DNR SOUTHEAST REGION

Attn: RR Program Assistant
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee WI 53212

DNR WEST CENTRAL REGION

Attn: RR Program Assistant
Department of Natural Resources
1300 Clairemont Ave.
Eau Claire WI 54702



Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer		Comments	
Fee Enclosed? <input type="radio"/> Yes <input type="radio"/> No	Fee Amount \$	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		



REMEDIAL ACTION OPTIONS REPORT

**PORTAGE CLEANERS
104 EAST WISCONSIN STREET
PORTAGE, WISCONSIN
WDNR BRRTS# 02-11-512824**

May 9, 2019

Prepared For:

Mr. Dave Bieno
Portage Cleaners
104 East Wisconsin Street
Portage, WI 53901

Prepared By:

EnviroForensics, LLC
N16 W23390 Stone Ridge Drive, Suite G
Waukesha, WI 53188
Phone: (262) 290-4001
www.enviroforensics.com

Handwritten signature of Kyle Heimstead in black ink.

Kyle Heimstead
Project Manager

Handwritten signature of Rob Hoverman in blue ink.

Rob Hoverman, LPG
Wisconsin Regional Director



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- 7 Proposed Areas for Excavation

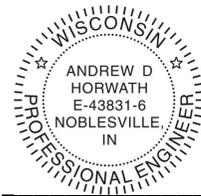


CERTIFICATIONS

I, Andrew Horwath, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code (WAC); that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Senior Engineer, PE Lic. No. E-43831-6

Signature, Title, and P.E. No.



P.E. stamp

I, Robert Hoverman, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Senior Project Manager

Signature and Title

May 10, 2019

Date

Document Reference:

Remedial Action Options Report
Portage Cleaners
104 East Wisconsin Street
Portage, Wisconsin
BRRTS# 02-11-512824



EXECUTIVE SUMMARY

EnviroForensics, LLC. (EnviroForensics) has prepared this Remedial Action Options Report (RAOR) on behalf of David Bieno and Portage Cleaners Inc., for the Portage Cleaners (Portage) facility located at 104 East Wisconsin Street in Portage, Wisconsin (Site). The Site currently operates as a commercial launderer and a drop off location for off-Site dry cleaning.

The Site consists of two (2) parcels that total approximately 0.29 acres with a separate single-story commercial building on each parcel. The building where former dry-cleaning operations were performed is located on the eastern parcel which occupies approximately 1,884 square feet (ft). The building now operates as a drop off location. The second building, located on the western parcel, conducts commercial laundry services, and occupies approximately 4,250 square ft. The parcel boundaries bisect the location of a previous building which also historically conducted dry cleaning operations as well as coin operated laundry. Both current Site buildings are slab on grade with the remainder of the property covered by paved asphalt driveway and gravel parking area. The location and topography of the Site is depicted on **Figure 1**, and the Site layout is depicted on **Figure 2a** and in more detail on **Figure 2b**.

Environmental impacts were initially detected in soil and groundwater at off-Site, adjacent locations during a Phase II Environmental Site Investigation completed in July 2003 by the Wisconsin Department of Transportation as part of a project related to the Portage Canal. Tetrachloroethene (PCE) and trichloroethene (TCE) were detected in soil at two (2) soil boring locations. PCE and TCE were also detected at one (1) grab-groundwater location.

MSA Professional Services, Inc. (MSA) was retained by Portage Cleaners in October 2003. Between October 2003 and June 2007, nine (9) soil borings were advanced to collect groundwater samples. Subsequently, nine (9) water table wells and two (2) piezometers were installed to monitor groundwater quality. Additionally, four (4) rounds of groundwater sampling were conducted between 2003 and 2007. Investigation activities identified additional soil and groundwater impacts on- and off-Site exceeding Wisconsin Department of Natural Resources (WDNR) screening levels.

Site investigation activities were continued by EnviroForensics between August 2017 and December 2018. The additional site investigation activities included: soil and grab-groundwater sampling, groundwater monitoring, and vapor intrusion assessments to further delineate soil, groundwater and vapor impacts on- and off-Site, respectively. Additionally one (1) groundwater monitoring well (MW-11) was installed downgradient to evaluate the migration and extent.

Further Site investigation activities were performed by EnviroForensics on February 4 – 5, 2019. The use included: soil sampling to confirm current Site soil conditions and further evaluate source area soil beneath the east building.

Chlorinated volatile organic compounds (CVOCs) were detected in soil at concentrations exceeding the risk-based soil to groundwater and non-industrial residual contaminant levels (RCLs) on- and off-Site. PCE was detected in soil at concentrations exceeding the risk-based industrial RCL beneath the building on-Site. A groundwater plume containing various CVOCs at concentrations above WDNR groundwater enforcement standards (ES) was also established with monitoring wells at locations on- and off-Site.

As exhibited in the soil and groundwater sample results, the area containing the highest CVOC impacts are beneath and adjacent to the Site building on the eastern parcel. Historically, the highest concentrations of CVOCs in groundwater were detected at off-Site well MW-9; however, the most recent groundwater data indicates the highest concentrations of CVOCs are currently at on-Site well MW-4. The elevated concentrations of PCE degradation daughter products observed in Site and downgradient monitoring wells indicate that natural attenuation of PCE is occurring.

Potential exposure pathways consist of direct contact with soil and groundwater, or inhalation of vapors. Direct-contact exposure to soil and groundwater impacts is currently prevented by surface cover materials (i.e. asphalt, concrete, and buildings). As indicated by the results of the vapor intrusion assessments, vapor intrusion does not appear to be occurring on- or off-Site.

Remedial actions were identified through an initial screening of technologies. The actions were evaluated considering technical and economic feasibility for the Site. The recommended option would rely on a combination of risk management strategies and remediation, including soil excavation for the vadose zone, and in-situ chemical reduction injections to treat groundwater, to bring the Site to regulatory closure.

Excavation of the highly contaminated silty sand soil would be completed in two (2) areas, beneath and adjacent to the east building. These excavation areas encompass the majority of the CVOC impacts in the vadose zone, and are considered the source area for continued generation of residual impacts to groundwater. The excavated soil would be hauled off-site for disposal at a permitted facility.

Due to the current status of groundwater concentrations and timing to design a full-scale excavation beneath the Site building, we are recommending an interim remedial action be

performed around the exterior portion of the east building. The interim excavation is readily accessible outside of the east building footprint. The excavation area will encompass the majority of the CVOC impacts in the vadose zone and would be advanced to a minimum of 4 ft below ground surface (bgs). This will ensure that higher CVOC concentrations that have a higher risk of contaminating groundwater are removed and would limit worker exposure during potential future construction at the Site. A remedial action plan will be prepared to address the remaining proposed soil excavation.

The recommended remedial option minimizes Site disruptions, potentially eliminates the need for long-term operation and maintenance of the vapor mitigation systems, and provides the most benefit with respect to overall costs of implementation. The results of periodic groundwater monitoring will be evaluated to determine whether additional actions are needed to achieve remediation goals.



1.0 INTRODUCTION

EnviroForensics, LLC has prepared this Remedial Action Options Report (RAOR) on behalf of David Bieno and Portage Cleaners Inc. for the Portage Cleaners facility located at 104 East Wisconsin Street in Portage, Wisconsin. This Report follows guidelines for selecting remedial actions set forth in the Wisconsin Administrative Code (WAC) Chapter NR 722 and other associated Chapter NR 700 series rules. This Report is being submitted as a result of the additional data found in the Supplemental Data Report dated May 11, 2018.

2.0 BACKGROUND AND HISTORY

2.1 Site and Surrounding Property Information

The Site is located at 104 East Wisconsin Street in Portage, Wisconsin. The location and topography of the Site is depicted on **Figure 1**. The site consists of two parcels that total approximately 0.29 acres with a separate single-story commercial building on each parcel as depicted on **Figure 2a** and **Figure 2b**. The building located on the eastern parcel occupies approximately 1,884 square feet (ft). The eastern building formerly operated as a dry cleaner, but now operates as a drop off location. The second building which is located on the western parcel, houses commercial operations and office space, and occupies approximately 4,250 square ft. The parcel boundaries bisect the location of a previous building, at which dry cleaning operations as well as coin operated laundry operations were historically conducted. Both Site buildings are slab on grade with the remainder of the property covered by paved asphalt driveway and gravel parking area between the two buildings. The Site is bound by the Portage Canal to the north; West Wisconsin Street then commercial buildings to the east; commercial properties to the southwest; Warren Street then commercial buildings to the southeast; and West Mullet Street then a single family residential home to the south. Utilities noted during the Site reconnaissance include water, storm sewer, sanitary sewer, natural gas, telephone, and electrical lines. The general layout of the Site and surrounding area, including salient Site features and utilities, are depicted on **Figure 2a** and **Figure 2b**.

2.2 Site History

The Site operated as a dry cleaner from the 1970s to approximately 1996. During that time, PCE was used for dry cleaning operations. The Site consists of two (2) slab-on-grade commercial buildings. A third building was located between the east and west buildings, which historically operated as a dry cleaning facility and a coin operated laundromat until it was destroyed by a fire in 1990. The eastern building formerly operated as a dry cleaner, but now operates as a drop off

location. The west building is utilized as a laundry facility and offices. Dry cleaning machines were located in the north portion of the central building, and two (2) obsolete dry cleaning machines remain on-Site within the east building (labeled “FDCM” and “DCM” on **Figure 2a** and **Figure 2b**).

3.0 CONCEPTUAL SITE MODEL

3.1 Geology and Hydrogeology

The topography at the Site is generally flat. In the surrounding area the land surface slopes gently toward the east. Unconsolidated fluvial sediment overlies bedrock in this portion of central Wisconsin. Cambrian Sandstone is expected to be encountered at 150 to 200 ft below ground surface (bgs). The lithological sequence encountered during environmental investigative activities was generally consistent across the Site. Silty sand, clayey sand, and well graded sand was encountered beneath surficial fill materials from 2 to 40 ft bgs. The Site building is situated approximately 360 ft north of the Wisconsin River and 100 ft south of the Portage Canal.

Groundwater is encountered at depths ranging from approximately 3 to 10 ft bgs at the Site. The direction of shallow groundwater flow is to the northeast. Recharge of groundwater to Site monitoring wells is quick due to the higher hydraulic conductivity of the sandy soil. The shallow groundwater in the unconsolidated sand is unconfined and not used as a resource for domestic applications. Monitoring well construction information is summarized on **Table 1** and groundwater elevations are summarized on **Table 2**. A potentiometric surface map depicting the shallow groundwater flow can be found on **Figure 3**.

As discussed in the Supplemental Data Report dated May 11, 2018, the results of slug testing indicate that the hydraulic conductivity (K) values of shallow saturated soil range from 1.037×10^{-3} centimeters per second (cm/sec) in MW-10 to 1.777×10^{-3} cm/sec in MW-4. The mean hydraulic conductivity calculated for tests conducted in MW-4 and MW-10 is 1.444×10^{-3} cm/sec. The results of slug testing indicate that the K values of deeper saturated soil range from 2.580×10^{-2} cm/sec in MW-10P to 4.763×10^{-2} cm/sec in MW-4P. The mean K calculated for tests conducted in MW-4P and MW-10P is 3.779×10^{-2} cm/sec. This would indicate that a more permeable soil type exists below the water table, which is consistent with the lithologic sequence observed at the Site.

The flow velocity (v) for shallow groundwater can be calculated using the above values for hydraulic conductivity and hydraulic gradient as: $v = KI/n$, where n = effective porosity of the

soil and I = hydraulic gradient. The value n is estimated for this type of soil at 35%. Using the mean K value for water table wells of 1.444×10^{-3} cm/sec, the groundwater flow velocity across the Site is approximately 2.06×10^{-4} cm/sec or 213 ft/year.

3.2 Nature and Extent of Impacts

The Site contaminants of concern are the CVOCs PCE and its associated breakdown products.

Soil samples collected from borings GP1A, GP1D, GP2, GW4, GP6 through GP9, MW3 through MW 6, B-1, B-9 through B-21, B-24, and B-28, contained concentrations of PCE and/or breakdown products above the soil to groundwater residual contaminant levels (RCLs). PCE was detected at concentrations exceeding the non-industrial RCL in soil samples collected from borings GP6, MW5, B-9 through B-11, and B-23. Additionally, PCE was detected at concentrations exceeding the industrial RCL in soil samples collected from borings B-25 through B-27.

The lateral extent of PCE detected in unsaturated soil at concentrations exceeding the non-industrial and industrial RCLs are depicted on **Figure 4** and summarized on **Table 3**.

Unsaturated soil samples are samples collected from 0-8 ft bgs. **Figure 4** shows the extent of PCE impacts in shallow soil above the non-industrial and industrial RCLs are limited to within the Site property boundary. The highest concentrations of PCE generally exist in soil beneath the Site building on the eastern parcel. However, PCE was detected in soil at one boring (MW5) to the north west of the eastern Site building at a concentration above the non-industrial RCL. Given the location and concentration of the soil sample, it is anomalous and is possibly due to an unreported and incidental spill. Soil concentrations above the migration to groundwater standard are generally present across the Site.

The lateral extent of CVOC concentrations in groundwater exceeding regulatory standards are depicted on **Figure 5** and grab groundwater and monitoring well analytical results summarized on **Table 4** and **Table 5**, respectively. The extent of PCE and TCE detected at concentrations exceeding their respective ES extend off-site approximately 120 ft to the east. The extension of groundwater impacts off-site is likely due to local shallow groundwater flow which is in the same direction.

The horizontal and vertical distribution of groundwater impacts with depth are depicted on **Figure 6**. The vertical extent of CVOC impacts in groundwater above regulatory standards is generally limited to the depth of water table observation wells which are screened between 3.5-16 ft bgs. Groundwater impacts generally coincide with the distribution of soil impacts, which

appear limited to depths of approximately 15 ft bgs. The vertical migration of PCE impacts appears limited as demonstrated by the low concentrations detected at piezometer MW-10P. It appears that natural attenuation is occurring at depth and distance from the source based on the concentrations and presence of TCE and cis-1,2,-dichloroethene detected in MW-9 and MW-10P.

It should be noted that during the construction of the Columbia County Administration Building located at 112 E. Edgewater St. in Portage Wisconsin, Seymour Environmental Services, Inc. utilized a dewatering system to remove groundwater between March 14, 2016 and April 8, 2016. During the time of operation, the system removed 6,148,600 gallons of groundwater. It is likely that the pumping removed much of the CVOCs in groundwater. **Table 5** shows the concentrations in many of the wells decreased significantly between the samples collected in 2007 and 2017; however, concentrations have rebounded in some of the wells.

The only detection of CVOCs in soil (above non-industrial and industrial RCLs) was PCE. The source of contamination is likely from un-documented and incidental releases of PCE which occurred in the vicinity of the dry cleaning machine and outdoor storage. The sub-surface utility corridor does not appear to have acted as a transport mechanism.

4.0 IDENTIFICATION OF REMEDIAL ACTION OPTIONS

The potentially feasible remedial actions were evaluated according to specific criteria outlined in WAC Chapter NR 722.07, including:

- Technical Feasibility
 - Short-Term Effectiveness,
 - Long-Term Effectiveness,
 - Ability to Implement, and
 - Restoration Time Frame.

- Economic Feasibility
 - Capital Costs,
 - Initial Cost,
 - Annual Operation and Maintenance, and
 - Future Liability.

Additionally, the need for continuing obligations after completion of a remedial action, such as maintenance of an engineering control, was considered. Each of these evaluation criteria are defined and described in the following sections.

4.1 Technical Feasibility

The feasibility of a technology to remediate impacted areas at any specific site is evaluated with regard to the following specific considerations:

- Proven technology: when a technology is fully developed and historical success case histories are available;
- Emerging technology: when a technology is not fully developed and may not be reliable;
- Inappropriate technology: when Site conditions are not technically suitable for the application of the technology; and
- Potential additional liability: whether the treatment technology may add additional liability.

4.1.1 Effectiveness

The key aspect of the technical feasibility evaluation is the effectiveness of each remedial action in protecting human health and the environment. Each potential remedial action is evaluated as to its effectiveness in providing protection and the reductions in toxicity, mobility, or volume of contamination that it would achieve. Both short- and long-term components of effectiveness are evaluated; short-term referring to the construction and implementation period until case closure, and long-term referring to the period after remediation is complete. Reduction of toxicity, mobility, or volume refers to changes in one or more characteristics of the contaminated media using treatment that decreases the inherent risks. Any remedial action option under consideration should minimize adverse impacts to Site workers, visitors, the surrounding population, and the environment.

4.1.2 Ability to Implement

The ability to implement is a measure of both the technical and administrative feasibility of constructing, operating, and maintaining a remedial action option, and is used to evaluate combinations of remedial actions with respect to conditions at a specific site. The determination that an option is not readily implementable would usually preclude it from further consideration unless steps can be taken to change the conditions responsible for the determination.

The technical aspects related to the ability to implement refer to the ability to construct, reliably operate, and meet technology-specific regulations for remedial actions until remediation is complete. It also includes operation, maintenance, replacement, and monitoring of technical components of an action, if required, into the future after the remedial action is complete. The evaluation also considers the ability to obtain approvals and permitting from other offices and agencies, the availability of treatment, storage, and disposal services and capacity, and the requirements for, and availability of, specific equipment and technical specialists.

4.1.3 *Restoration Time Frame*

Restoration time frame relates to the time required to sever the exposure pathway and complete the remedial action. The estimated time for completion of a remedial action and restoration of the environment is based on the information available from vendor(s) with experience in remediating comparable sites, and EnviroForensics' experience using technologies in similar settings. Contaminant degradation rates, both naturally and under treatment conditions, are assumed based on experience to estimate the duration of remedial actions. For institutional and engineering controls, restoration is complete once the control is effective, however, these controls do not meet the remedial objective and must be paired with other technologies.

4.2 *Economic Feasibility*

The cost to implement an option represents a combination of typical contractor costs and consultant efforts coupled with the estimated time to achieve remedial endpoints. This is inherent because uncertainties associated with the definition of options often remain, and it may not be possible or practical to collect all the data needed to further refine costs.

The focus is on comparative estimates of costs between options so that if costs go up or down during the remedial process, they remain relative. The following cost factors are considered during the evaluation of options:

- Initial costs: those costs incurred for design and testing of the remedial action;
- Capital costs: the cost to construct, install, or otherwise implement the remedial action;
- Operation and maintenance (O&M) costs: the costs to operate and maintain the remedial system or technology. The evaluation includes those O&M costs that would be incurred for as long as necessary, even after the initial remedial action is complete; and
- Future liability: includes potential additional remedial action costs and costs for property re-development were considered during evaluation to the extent they can be estimated.

4.3 Continuing Obligations

The involvement of continuing obligations in the closure strategy is considered in the evaluation process. Post-closure obligations may include activities such as annual cover inspections and operation, maintenance, and inspection of vapor mitigation systems. These activities may be required for an indefinite period following case closure. A remedial action is considered more advantageous if the resulting need for continuing obligations is limited or eliminated.

4.4 Remedial Action Options Not Selected

An initial evaluation for remedial technologies was completed and the following general response actions were identified as not appropriate based on the above criteria outlined in sections 4.1 through 4.3.

- Unsaturated Zone (0-6 ft)
 - No Remediation;
 - Institutional Controls;
 - Engineering Controls; and
 - In-Situ Remediation by mechanical or chemical means.

These options were rejected due to difficulties in implementation. Space constraints, high soil concentrations, and shallow groundwater will impede the effectiveness of these technologies. Additionally, in-situ chemical treatment would render the area unusable due to instability unless secondary concrete stabilization was implemented.

- Saturated Zone
 - Monitored natural attenuation;
 - Institutional Controls;
 - Engineering Controls;
 - Removal and treatment (pump, treat, and discharge, or pump, treat, and re-infiltrate);
 - Removal and landfill disposal, or removal, ex-situ treatment and disposal; and
 - Contain and treat using a reactive barrier wall.

These options have been rejected due to basic feasibility in a shallow groundwater setting, duration to completion, and the high cost of implementation of the actions. Additionally, the elevated concentrations and minimal PCE daughter products at the Site indicate that natural attenuation is not occurring.

4.5 Remedial Action Options Selected

Since no action is not permitted for this Site, the initial evaluation for remedial technologies identified the following actions as appropriate based on the above criteria outlined in sections 4.1 through 4.4.

- Soil
 - Excavation and Disposal in a Permitted Facility; and
- Groundwater
 - In-Situ Remediation – Injection: In-Situ Chemical Reduction

These options would rely on a combination of risk management strategies and remediation to bring the Site to regulatory closure. Remedial actions would consist of excavating the heavily contaminated unsaturated soil and injections to treat the near-source groundwater plume. The primary remediation objectives would be to remove source material that would be encountered by construction or utility work and require special management; and contributes to groundwater contaminant concentrations above the ES.

Excavation would be completed in two (2) areas on-Site. The two (2) excavation areas are depicted on **Figure 7**. The first excavation area is outside the east building footprint. The objective is to cost effectively remove higher CVOC concentrations that are accessible and have a higher risk of contaminating groundwater and would limit worker exposure during potential future construction at the Site. Monitoring wells MW3 and MW4, and piezometer MW4P would be abandoned during excavation activities and replaced once the excavation is backfilled. The second excavation area is under the east building. To access the entire extent of contaminated soil, the site building would need to be demolished or significantly modified to access the soils. The excavation would extend to 4-6 ft or the depth to groundwater. However, if the building were to be left in place, the depth of excavation would be limited to shallower depths due to working space restrictions.

These excavation areas encompass the majority of the CVOC impacts in the vadose zone. The excavated soil would be transported off-site for disposal in a permitted facility. Vapor assessments occur after the soil beneath the Site building is excavated to evaluate if a vapor mitigation system would be necessary.

Groundwater sampling events would be performed after the excavations have been completed and prior to any injections. The additional groundwater data collected would provide current

groundwater conditions and evaluate the effectiveness of the excavations in reducing the mass loading of CVOCs to groundwater. It would also aid in designing a full-scale injection.

In general, groundwater remediation would include zero-valent iron (ZVI) injections to treat the near-source groundwater plume. For the purpose of this document, “ZVI” is used in lieu of a specific product. The product selected will utilize the ZVI in-situ chemical reduction (ISCR) technology most likely in combination with enhanced reductive de-chlorination (ERD).

It is anticipated that inclusion on the WDNR Geographic Information Systems Registry will be necessary for residual groundwater contamination at downgradient locations.

5.0 INJECTION PILOT TESTING

In-situ remediation of groundwater impacts at and near the source area is the most practicable and cost-effective approach once source treatment is complete. Specifically, injection of a reducing amendment would be an appropriate treatment for the concentrations and depths of contamination present at the Site. However, any in-situ remedial approach should be tested prior to full-scale application. The objectives of the testing would be to:

- Evaluate the feasibility of subsurface injection; and
- Collect data to design a full-scale source area treatment.

The ZVI injections would target groundwater below the Site property. A remedial design characterization phase would be prepared to conduct the pilot test injection. This step would allow an appropriate full-scale injection design to be developed, including injection point spacing and product volumes required to treat each interval.

6.0 INTERIM ACTION

The remedial option described in section 4.5 identifies two (2) areas that contain elevated concentrations of PCE in soil. Current groundwater concentrations are low compared to past events. This is likely due to the dewatering system that operated between March 14, 2016 and April 8, 2016. The primary objective of an interim excavation is to remove highly contaminated material that continually supports dissolved phase impacts to reduce groundwater concentrations. The area near outside the east building is currently accessible and the direct contact to the contaminated soil is currently only prevented by surface cover materials (i.e. gravel and asphalt).

Given the straightforward nature of the exterior excavation and removal action, the time develop and design a plan to address the impacts below the building footprint would slow down the time frame to address impacts readily accessible exterior soils. The interim activities are described in the following sections.

6.1 Interim Remedial Excavation

The interim remedial excavation would take place outside the east building footprint. The excavation area will encompass the majority of the CVOC impacts in the vadose zone and would be advanced to a minimum of 4 ft bgs. This will ensure that higher CVOC concentrations that have a higher risk of contaminating groundwater are removed and would limit worker exposure during potential future construction at the Site. The extent of the interim excavation is depicted on **Figure 7**.

The soil will be excavated by mechanical methods and transported off-site for disposal at a permitted facility. Approximately 512 tons of non-hazardous soil will be removed. Excavated non-hazardous soil will be loaded and transported for disposal at Madison Prairie Landfill in Sun Prairie, Wisconsin.

Confirmation samples will be collected from the excavation. Approximately 10 samples will be collected from sidewalls, and three (3) samples will be collected from the floor of the excavation. Soil samples will be transmitted to a state-certified laboratory and analyzed for CVOCs according to U.S. EPA SW-846 Method 8260.

The excavation will be backfilled with clean compactable fill and topped with an asphalt cap. Monitoring wells MW3 and MW4, and piezometer MW4P will be replaced with permanent wells to assess groundwater conditions post excavation.

6.2 Monitoring Well Installation, Development, and Sampling

After excavation activities are completed, two (2) water table monitoring wells MW3 and MW4 (to be renamed MW3R and MW4R, respectively), and one (1) piezometer (MW4PR) will be re-installed. The wells will be installed in accordance with the requirements of WAC Chapter NR 141. Well materials will consist of 2-inch diameter PVC. At the surface, the wells will be completed with a flush-mounted vaults. Expandable locking caps and keyed alike locks will be placed on each well. The new monitoring wells will be developed according to the procedures described in WAC Chapter NR 141. Monitoring well construction and development information

will be recorded on WDNR Forms 4400-133A/B and submitted with subsequent Remedial Action reporting.

7.0 CONCLUSIONS AND RECOMMENDATIONS

After the evaluation of the concentrations and depths of contamination present in soil and groundwater at the Site, soil excavation and injection of a reducing amendment are appropriate remedial strategies for soil and groundwater, respectively. This recommendation is the best option with respect to technical and economic feasibility, and assurance of contaminant removal and destruction. The long-term liability will be reduced significantly by removing the soil source and is expected to provide more certainty regarding the timeframe to reach remedial end-points. Long-term monitoring requirements will also be significantly reduced with an aggressive source reduction approach.

Groundwater monitoring will be performed post excavation activities to establish revised baseline concentrations prior to evaluating the need for subsequent injections. Should injections be required to address the groundwater contamination, an injection pilot test is highly recommended prior to any full-scale implementation. This step would allow an appropriate full-scale injection design to be developed, including injection point spacing and product volumes required to treat each interval, and proposed activities would be proposed under separate cover.

Due to the current status of groundwater concentrations and timing to design a full-scale excavation beneath the Site building, we are recommending an interim remedial action be performed around the exterior portion of the east building. The interim excavation is readily accessible and would remove highly contaminated material that continually feeds dissolved phase impacts and reduce groundwater concentrations on-site to prevent ongoing off-Site migration. A remedial action plan will be prepared to address the remaining proposed soil excavation.



TABLES

TABLE 1
MONITORING WELL CONSTRUCTION DETAILS

Portage Cleaners
104 E. Wisconsin St., Portage, WI 53901

Well ID	Date Installed	Consultant	Well Diameter (inches)	Northing	Easting	Ground Elevation (feet AMSL)	TOC Elevation (feet AMSL)	Top Screen Elevation (feet AMSL)	Bottom Screen Elevation (feet AMSL)	Screened Interval (feet bgs)	Total Depth (feet bgs)
MW-1	6/22/2005	MSA Professional Services	2	393,659.81	537,998.74	791.27	790.47	787.77	777.77	3.50 - 13.50	13.50
MW-2	6/22/2005		2	393,615.34	538,001.64	790.29	789.83	786.39	776.39	3.90 - 13.90	13.90
MW-3	6/22/2005		2	393,693.14	537,942.19	792.07	792.44	787.07	777.07	5.00 - 15.00	15.00
MW-4	6/22/2005		2	393,704.58	537,992.74	792.83	792.38	788.83	778.83	4.00 - 14.00	14.00
MW-4P	6/22/2005		2	393,704.45	537,995.38	792.84	792.33	767.84	762.84	25.00 - 30.00	30.00
MW-5	6/23/2005		2	393,735.33	537,928.40	793.28	792.98	788.38	778.38	4.90 - 14.90	14.90
MW-6	6/23/2005		2	393,704.64	537,908.61	791.88	791.37	787.88	777.88	4.00 - 14.00	14.00
MW-7	6/23/2005		2	393,619.31	537,896.58	790.82	790.25	786.82	776.82	4.00 - 14.00	14.00
MW-8	6/5/2007		2	393,466.47	537,971.57	790.57	790.23	786.57	776.57	4.00 - 14.00	14.00
MW-9	6/5/2007		2	393,693.74	538,201.19	791.80	791.25	786.80	776.80	5.00 - 15.00	15.00
MW-10	6/5/2007	2	393,772.15	538,068.04	792.68	792.25	786.68	776.68	6.00 - 16.00	16.00	
MW-10P	6/5/2007	2	393,774.93	538,066.65	792.62	792.05	767.62	762.62	25.00 - 30.00	30.00	
MW-11	5/4/2018	EnviroForensics	2	393,824.58	538,656.55	789.07	788.69	785.57	775.57	3.50 - 13.50	13.50

Notes:

Coordinates are referenced to Wisconsin State Plane, NAD 27, Southern Zone

AMSL = above mean sea level

bgs = below ground surface

NA = Not Available

TOC = top of casing

**TABLE 2
GROUNDWATER ELEVATION DATA**

Portage Cleaners
104 E. Wisconsin St., Portage, WI 53901

Well ID	Date	TOC Elevation (AMSL)	Depth to Water (feet below TOC)	Groundwater Elevation (AMSL)	
MW-1	6/23/2005	790.47	7.23	783.24	
	6/24/2005		7.31	783.16	
	7/14/2005		8.00	782.47	
	10/20/2005		8.11	782.36	
	6/5/2007		7.48	782.99	
	7/6/2007		8.00	782.47	
	10/30/2007		7.18	783.29	
	10/4/2017		7.51	782.96	
	6/5/2018		6.80	783.67	
	9/5/2018		5.56	784.91	
	12/3/2018		6.48	783.99	
	3/21/2019		4.81	785.66	
	Min.		4.81	782.36	
	Max.		8.11	785.66	
Avg.		7.04	783.43		
MW-2	6/23/2005	789.83	6.09	783.74	
	6/24/2005		6.17	783.66	
	7/14/2005		6.88	782.95	
	10/20/2005		6.98	782.85	
	6/5/2007		6.31	783.52	
	7/6/2007		6.86	782.97	
	10/30/2007		6.01	783.82	
	10/4/2017		6.32	783.51	
	6/5/2018		5.64	784.19	
	9/5/2018		4.28	785.55	
	12/3/2018		3.22	786.61	
	3/21/2019		3.49	786.34	
	Min.		3.22	782.85	
	Max.		6.98	786.61	
Avg.		5.69	784.14		
MW-3	6/24/2005	792.44	8.45	783.99	
	7/14/2005		9.10	783.34	
	10/20/2005		9.21	783.23	
	6/5/2007		8.61	783.83	
	7/6/2007		9.11	783.33	
	10/30/2007		8.27	784.17	
	10/4/2017		8.60	783.84	
	6/5/2018		7.85	784.59	
	9/5/2018		6.68	785.76	
	12/3/2018		7.45	784.99	
	3/21/2019		5.95	786.49	
	Min.		5.95	783.23	
	Max.		9.21	786.49	
	Avg.		8.12	784.32	
MW-4	6/24/2005	792.38	8.77	783.61	
	7/14/2005		9.43	782.95	
	10/20/2005		9.54	782.84	
	6/5/2007		8.92	783.46	
	7/6/2007		9.43	782.95	
	10/30/2007		8.58	783.80	
	10/4/2017		8.86	783.52	
	6/5/2018		8.14	784.24	
	9/5/2018		7.04	785.34	
	12/3/2018		7.89	784.49	
	3/21/2019		6.30	786.08	
	Min.		6.30	782.84	
	Max.		9.54	786.08	
	Avg.		8.45	783.93	

**TABLE 2
GROUNDWATER ELEVATION DATA**

Portage Cleaners
104 E. Wisconsin St., Portage, WI 53901

MW-4P	6/24/2005	792.33	8.85	783.48	
	7/14/2005		9.38	782.95	
	10/20/2005		9.52	782.81	
	6/5/2007		8.86	783.47	
	7/6/2007		9.33	783.00	
	10/30/2007		8.69	783.64	
	10/4/2017		8.82	783.51	
	6/5/2018		8.17	784.16	
	9/5/2018		7.03	785.30	
	12/3/2018		7.85	784.48	
	3/21/2019		6.52	785.81	
	Min.		6.52	782.81	
	Max.		9.52	785.81	
	Avg.		8.46	783.87	
MW-5	6/24/2005	792.98	9.41	783.57	
	7/14/2005		10.02	782.96	
	10/20/2005		10.16	782.82	
	6/5/2007		9.57	783.41	
	7/6/2007		10.05	782.93	
	10/30/2007		9.33	783.65	
	10/4/2017		9.49	783.49	
	6/5/2018		8.78	784.20	
	9/5/2018		7.76	785.22	
	12/3/2018		8.52	784.46	
	3/21/2019		7.09	785.89	
	Min.		7.09	782.82	
	Max.		10.16	785.89	
	Avg.		9.11	783.87	
MW-6	6/24/2005	791.37	7.77	783.60	
	7/14/2005		8.42	782.95	
	10/20/2005		8.53	782.84	
	6/6/2007		7.88	783.49	
	7/6/2007		8.45	782.92	
	10/30/2007		7.58	783.79	
	11/13/2017		7.92	783.45	
	6/5/2018		7.20	784.17	
	9/5/2018		6.00	785.37	
	12/3/2018		6.91	784.46	
	3/21/2019		5.21	786.16	
	Min.		5.21	782.84	
	Max.		8.53	786.16	
	Avg.		7.44	783.93	
MW-7	6/24/2005	790.25	6.60	783.65	
	7/14/2005		7.30	782.95	
	10/20/2005		7.39	782.86	
	6/5/2007		6.76	783.49	
	7/6/2007		7.29	782.96	
	10/30/2007		6.41	783.84	
	10/4/2017		6.79	783.46	
	6/5/2018		6.06	784.19	
	9/5/2018		4.55	785.70	
	12/3/2018		5.64	784.61	
	3/21/2019		3.93	786.32	
	Min.		3.93	782.86	
	Max.		7.39	786.32	
	Avg.		6.25	784.00	
MW-8	6/5/2007	790.23	6.61	783.62	
	6/6/2007		6.50	783.73	
	7/6/2007		7.25	782.98	
	10/30/2007		6.31	783.92	
	11/13/2017		6.29	783.94	
	6/5/2018		5.87	784.36	
	9/5/2018		3.91	786.32	
	12/3/2018		5.50	784.73	
	3/21/2019		2.91	787.32	
	Min.		2.91	782.98	
	Max.		7.25	787.32	
	Avg.		5.68	784.55	

TABLE 2
GROUNDWATER ELEVATION DATA

Portage Cleaners
104 E. Wisconsin St., Portage, WI 53901

MW-9	6/5/2007	791.25	7.83	783.42	
	6/6/2007		7.79	783.46	
	7/6/2007		8.24	783.01	
	10/30/2007		7.59	783.66	
	10/4/2017		7.81	783.44	
	6/5/2018		7.25	784.00	
	9/5/2018		5.98	785.27	
	12/3/2018		6.79	784.46	
	3/21/2019		5.45	785.80	
	Min.		5.45	783.01	
	Max.		8.24	785.80	
	Avg.		7.19	784.06	
MW-10	6/5/2007	792.25	8.91	783.34	
	6/6/2007		8.88	783.37	
	7/6/2007		9.35	782.90	
	10/30/2007		8.60	783.65	
	10/4/2017		8.79	783.46	
	6/5/2018		8.20	784.05	
	9/5/2018		7.11	785.14	
	12/3/2018		7.91	784.34	
	3/21/2019		6.59	785.66	
	Min.		6.59	782.90	
	Max.		9.35	785.66	
	Avg.		8.26	783.99	
MW-10P	6/5/2007	792.05	9.13	782.92	
	6/6/2007		9.00	783.05	
	7/6/2007		9.37	782.68	
	10/30/2007		8.86	783.19	
	10/4/2017		8.76	783.29	
	6/5/2018		8.30	783.75	
	9/5/2018		7.59	784.46	
	12/3/2018		8.11	783.94	
	3/21/2019		7.37	784.68	
	Min.		7.37	782.68	
	Max.		9.37	784.68	
	Avg.		8.50	783.55	
MW-11	6/5/2018	788.69	4.86	783.83	
	9/5/2018		3.81	784.88	
	12/3/2018		4.57	784.12	
	3/21/2019		3.17	785.52	
	Min.		3.17	783.83	
	Max.		4.86	785.52	
Avg.		4.10	784.59		

TOC = Top of Casing

Based on survey completed November 21, 2017 by Surveying Associates, Inc.

AMSL = above mean sea level

TABLE 3
SOIL ANALYTICAL RESULTS
Portage Cleaners
104 E. Wisconsin St., Portage, WI 53901

Consultant	Boring Identification	Sample Depth (feet bgs)	Sample Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Bromodichloromethane	Chloroform	Toluene	Ethylbenzene	Xylenes (Total)	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Naphthalene	Methylene chloride	Methyl Tert-Butyl Ether
				VOCs (µg/kg)															
Residual Contaminant Level - Industrial				145,000	8,410	2,340,000	1,850,000	2,080	7,410	1,830	1,980	818,000	35,400	260,000	182,000	219,000	24,100	1,150,000	145,000
Residual Contaminant Level - Non Industrial				33,000	1,300	156,000	1,560,000	67	1,490	418	454	818,000	8,020	260,000	182,000	219,000	5,520	61,800	145,000
Residual Contaminant Level - Soil to Groundwater				4.5	3.6	41.2	62.6	0.1	1,490	0.3	3.3	1,107	1,570	3,960	NE	NE	658.2	NE	NE
MSA Professional Services	GP1A	0-4	10/28/2003	260	15	<7.3	<9.4	<9.4	<9.4	NA	NA	<9.4	<6.3	<21	<9.4	<7.3	<20	NA	<10
	GP1D	4-8	10/28/2003	1,600	<9.4	<9.4	<12	<12	<12	NA	NA	<12	<8.0	<27	<12	<9.4	<25	NA	<13
	GP2	4-8	10/28/2003	140	<7.7	<7.7	<9.9	<9.9	<9.9	NA	NA	<9.9	<6.6	<22	<9.9	<7.7	<21	NA	<11
	GP3	4-8	10/28/2003	<11	<7.7	<7.7	<9.9	<9.9	<9.9	NA	NA	<9.9	<6.6	<22	<9.9	<7.7	<21	NA	<11
	GP4	0-4	10/28/2003	7,200	<7.6	<7.6	<9.8	<9.8	<9.8	NA	NA	<9.8	<6.5	<22	<9.9	<7.7	<21	NA	<11
	GP5	4-8	10/28/2003	<11	<7.5	<7.5	<9.7	<9.7	<9.8	NA	NA	<9.8	<6.5	<22	<9.9	<7.7	<21	NA	<11
	GP6	4-8	10/28/2003	41,000	42	<9.3	<12	<12	<12	NA	NA	<12	<8.0	<27	<12	<9.3	<25	NA	<13
	GP7	4-8	10/28/2003	2,400	<23	<17	<14	<17	<7.5	NA	NA	<11	<11	<29	<12	<12	<18	NA	<8.0
	GP8	5-7	10/28/2003	930	<20	<15	<21	<15	<6.6	NA	NA	<9.3	<9.3	<25	<11	<11	<16	NA	<8.0
	GP9	6-8	10/28/2003	2,200	<19	<14	<20	<14	<6.2	NA	NA	<8.7	<8.7	<24	<10	<10	<15	NA	<7.5
	MW-2	4-6	6/22/2005	<19	<22	<16	<24	<16	<7.5	NA	NA	<10	<10	<28	<12	<12	<18	NA	<9.0
	MW-3	6-8	6/23/2005	1,800	<18	<13	<19	<13	<6.0	NA	NA	<8.4	<8.4	<23	<9.6	<9.6	<14	NA	<7.2
	MW-5	6-8	6/23/2005	43,000	110	<15	<22	<15	<7.9	NA	NA	<9.7	<9.7	<26	<11	<11	<17	NA	<8.3
	MW-6	5-7	6/23/2005	1,000	72	<14	<20	<14	<6.5	NA	NA	<9.1	<25	<10	<10	<16	<7.8	NA	<7.6
	MW-7	5-7	6/23/2005	<16	<19	<14	<20	<14	<6.3	NA	NA	<8.8	<8.8	<24	<10	<10	<15	NA	<7.6
	MW-8	5-7	6/5/2007	<9.6	<12	<8.5	<18	<9.6	<7.5	NA	NA	<9.6	<7.5	<16	<7.5	<6.4	<27	NA	<9.6
MW-9	6-8	6/5/2007	<11	<13	<9.8	<21	<11	<8.6	NA	NA	<11	<8.6	<18	<8.6	<7.4	<31	NA	<11	
MW-10	8-9	6/5/2007	<10	<12	<9.0	<19	<10	<7.8	NA	NA	<10	<7.8	<17	<7.8	<6.7	<28	NA	<10	

TABLE 3
SOIL ANALYTICAL RESULTS
Portage Cleaners
104 E. Wisconsin St., Portage, WI 53901

Consultant	Boring Identification	Sample Depth (feet bgs)	Sample Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Bromodichloromethane	Chloroform	Toluene	Ethylbenzene	Xylenes (Total)	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Naphthalene	Methylene chloride	Methyl Tert-Butyl Ether
				VOCs (µg/kg)															
Residual Contaminant Level - Industrial				145,000	8,410	2,340,000	1,850,000	2,080	7,410	1,830	1,980	818,000	35,400	260,000	182,000	219,000	24,100	1,150,000	145,00
Residual Contaminant Level - Non Industrial				33,000	1,300	156,000	1,560,000	67	1,490	418	454	818,000	8,020	260,000	182,000	219,000	5,520	61,800	145,000
Residual Contaminant Level - Soil to Groundwater				4.5	3.6	41.2	62.6	0.1	1,490	0.3	3.3	1,107	1,570	3,960	NE	NE	658.2	NE	NE
EnviroForensics	B-1	1-3	8/7/2017	36 J	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
		5-10	8/7/2017	<32	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
		10-12	8/7/2017	<32	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-2	2-4	8/7/2017	<32	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-3	4-6	8/7/2017	<32	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
		12-13	8/7/2017	<32	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-4	4-6	8/7/2017	<32	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-5	4-6	8/7/2017	<32	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-6	4-5	8/7/2017	<32	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
		11-13	8/7/2017	<32	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-7	2-4	8/7/2017	295	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-9	2-4	8/7/2017	142,000	760	430	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
		6-8	8/7/2017	2,860	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-10	1-2	8/7/2017	22,300	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
		4-6	8/7/2017	108,000	470	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-11	4-5	8/7/2017	51,000	106 J	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
		8-10	8/7/2017	49,000	124 J	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-12	2-4	2/4/2019	1,040	<41	<32	<28	<19	<30	<74	<35	<32	<35	122 J	<32	<25	<94	<150	<50
		4-6		3,500	125 J	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-13	2-4	2/4/2019	9,100	<410	<320	<280	<190	<300	<740	<350	<320	<350	<1160	<320	<250	<940	<1500	<500
		4-5		137	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-14	2-4	2/4/2019	<32	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
		4-5		9,800	<410	<320	<280	<190	<300	<740	<350	<320	<350	<1160	<320	<250	<940	<1500	<500
B-15	2-4	2/4/2019	8,000	<410	<320	<280	<190	<300	<740	<350	<320	<350	<1160	<320	<250	<940	<1500	<500	
B-16	2-4	2/4/2019	960	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50	
	4-5		610	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50	
B-17	0-2	2/4/2019	2,190	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50	
	4-5		48 J	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50	

TABLE 3
SOIL ANALYTICAL RESULTS
 Portage Cleaners
 104 E. Wisconsin St., Portage, WI 53901

Consultant	Boring Identification	Sample Depth (feet bgs)	Sample Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Bromodichloromethane	Chloroform	Toluene	Ethylbenzene	Xylenes (Total)	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Naphthalene	Methylene chloride	Methyl Tert-Butyl Ether
				VOCs (µg/kg)															
Residual Contaminant Level - Industrial				145,000	8,410	2,340,000	1,850,000	2,080	7,410	1,830	1,980	818,000	35,400	260,000	182,000	219,000	24,100	1,150,000	145,00
Residual Contaminant Level - Non Industrial				33,000	1,300	156,000	1,560,000	67	1,490	418	454	818,000	8,020	260,000	182,000	219,000	5,520	61,800	145,000
Residual Contaminant Level - Soil to Groundwater				4.5	3.6	41.2	62.6	0.1	1,490	0.3	3.3	1,107	1,570	3,960	NE	NE	658.2	NE	NE
EnviroForensics	B-18	2-4	2/4/2019	3,060	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-19	2-4	2/4/2019	550	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
		4-5		2,280	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-20	2-4	2/4/2019	6,400	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	27.6 J	<94	<150	<50
		4-5	2/4/2019	49 J	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50
	B-21	2-4	2/4/2019	2,980	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	1,110	<50
	B-23	3-4	2/4/2019	37,000	<410	<320	<280	<190	<300	<740	<350	<320	<350	<1160	<320	<250	<940	<1500	<500
		5-6		11,300	<410	<320	<280	<190	<300	<740	<350	<320	<350	<1160	<320	<250	<940	<1500	<500
	B-24	1-2	2/4/2019	11,700	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	29.2 J	<94	<150	<50
	B-25	3-4	2/5/2019	500,000	<2050	<1600	<1400	<950	<1500	<3700	<1750	<1600	<1750	<5800	<1600	<1250	<4700	<7500	<2500
		5-6		42,000	<2050	<1600	<1400	<950	<1500	<3700	<1750	<1600	<1750	<5800	<1600	<1250	<4700	<7500	<2500
	B-26	1-2	2/5/2019	40,000	<2050	<1600	<1400	<950	<1500	<3700	<1750	<1600	<1750	<5800	<1600	<1250	<4700	<7500	<2500
4-5		150,000		<2050	<1600	<1400	<950	<1500	<3700	<1750	<1600	<1750	<5800	<1600	<1250	<4700	<7500	<2500	
B-27	5-6	2/5/2019	970	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50	
	3-4		293,000	<2050	<1600	<1400	<950	<1500	<3700	<1750	<1600	<1750	<5800	<1600	<1250	<4700	<7500	<2500	
B-28	5-6	2/5/2019	8,000	<205	<160	<140	<95	<150	<370	<175	<160	<175	<580	<160	<125	<470	<750	<250	
B-28	1-2	2/5/2019	4,100	<41	<32	<28	<19	<30	<74	<35	<32	<35	<116	<32	<25	<94	<150	<50	

Notes:

Updated with WDNR's March 2017 Remediation Redevelopment Program RCL spreadsheet

All concentrations reported in units of micrograms per kilogram (µg/kg)

Samples analyzed using EPA SW-846 Method 8260

Bolded values are above detection limits

Bolded and Shaded blue values exceed the WDNR generic Soil to Groundwater Residual Contaminant Levels

Bolded and Shaded green values exceed the WDNR generic Non-Industrial Residual Contaminant Levels

Bolded and Shaded orange values exceed the WDNR generic Industrial Residual Contaminant Levels

Gray Shaded value indicates soil collected below water table

VOCs = Volatile Organic Compounds

J = Concentration is less than the reporting limit but greater than the method detection limit.

NA - Not Analyzed

TABLE 4
GRAB GROUNDWATER ANALYTICAL RESULTS

Portage Cleaners
104 E. Wisconsin St., Portage, WI 53901

Consultant	Sample Location	Depth (ft)	Date Sampled	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride	Chloromethane	Chloroform	Dichlorodifluoromethane	Toluene	Trimethylbenzenes (Total)
Enforcement Standard				5	5	70	100	0.2	30	6	NE	800	480
Preventive Action Limit				0.5	0.5	7	20	0.02	3	0.6	NE	80	48
MSA Professional Services	GP-1D	12	10/28/2003	3.1	<0.40	<0.30	<0.40	<0.40	<0.27	<0.11	<0.50	0.50	ND
	GP-2	12	10/28/2003	53	13	4.8	<0.40	0.8	0.29	<0.11	1.1	ND	ND
	GP-3	12	10/28/2003	4	0.40	<0.13	<0.28	<0.40	<0.27	<0.11	<0.50	0.63	0.13
	GP-4	12	10/28/2003	450	3.7	<0.30	<0.40	<0.40	<0.27	<0.11	<0.50	0.37	ND
	GP-5	12	10/28/2003	5.4	0.53	<0.30	<0.40	<0.40	<0.27	<0.11	<0.50	0.35	ND
	GP-6	12	10/28/2003	850	3.7	<0.30	<0.40	<0.40	0.29	<0.11	<0.50	0.42	ND
EnviroForensics	B-1	5-10	8/7/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<1.3	<0.96	<0.38	<0.67	<2.05
	B-2	5-10	8/7/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<1.3	<0.96	<0.38	<0.67	<2.05
	B-3	5-10	8/7/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<1.3	<0.96	<0.38	<0.67	<2.05
	B-4	5-10	8/7/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<1.3	<0.96	<0.38	<0.67	<2.05
	B-5	5-10	8/7/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<1.3	<0.96	<0.38	<0.67	<2.05
	B-6	5-10	8/7/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<1.3	<0.96	<0.38	<0.67	<2.05
	B-7	5-10	8/7/2017	25.4	4.1	2.43	<0.35	1.14	<1.3	<0.96	0.40 J	<0.67	<2.05
	B-8	20-24	8/7/2017	3.5	1.89	<0.41	<0.35	<0.19	<1.3	<0.96	<0.38	<0.67	<2.05
		25-29	8/7/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<1.3	<0.96	<0.38	<0.67	<2.05
		30-34	8/7/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<1.3	<0.96	<0.38	<0.67	<2.05
36-40		8/7/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<1.3	<0.96	<0.38	<0.67	<2.05	
B-10	7-12	8/7/2017	104	0.48 J	<0.41	<0.35	<0.19	<1.3	10.9	<0.38	<0.67	<2.05	

Notes:

µg/L = micrograms per liter

Samples analyzed using EPA SW-846 Method 8260

VOCs = Volatile Organic Compounds

Bolded and orange shaded values are above Public Health Enforcement Standard

Bolded and blue shaded values are above Public Health Preventive Action Limit

Bolded values are above detection limits

Samples/constituents not shown are below laboratory reporting limits

J = Analyte concentration detected between the laboratory Reporting Limit and the laboratory Method Detection Limit



TABLE 5
MONITORING WELL SAMPLE ANALYTICAL RESULTS

Portage Cleaners
104 E. Wisconsin St., Portage, WI 53901

Monitoring Well Sample ID	Date Sampled	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride	Bromodichloromethane	Chloroethane	Chloroform	Chloromethane	Dibromochloromethane	Dichlorodifluoromethane	Methylene Chloride
		VOCs (µg/L)											
Enforcement Standard		5	5	70	100	0.2	0.6	400	6	3	60	1,000	5
Preventive Action Limit		0.5	0.5	7	20	0.02	0.06	80	0.6	0.3	6	200	0.5
MW-1	7/14/2005	160	1.6	<3.0	<3.0	<0.60	NLRA	NLRA	<2.5	<1.2	NLRA	<3.0	15
	10/20/2005	110	2.2	<3.0	<3.0	<0.60	NLRA	NLRA	<0.50	<1.2	NLRA	<0.660	<2.0
	7/6/2007	45	0.44	<0.40	<0.50	<0.15	NLRA	NLRA	<0.22	<0.30	NLRA	<0.40	<0.50
	10/30/2007	230	2.6	<4.0	<5.0	<1.5	NLRA	5.9	<2.2	<3.0	NLRA	<4.0	<5.0
	10/4/2017	30.1	<0.45	<0.41	<0.35	<0.19	4.9	<0.5	7.6	<1.3	<0.45	<0.38	<0.94
	6/6/2018	8.0	<0.3	<0.37	<0.34	<0.2	4.9	<0.61	9.5	<0.54	1.41	<0.32	<1.32
	9/5/2018	21.7	<0.3	<0.37	<0.34	<0.2	4.3	<0.61	6.0	<0.54	<0.22	<0.32	<1.32
	Dup 9/5/2018	22.3	<0.3	<0.37	<0.34	<0.2	4.1	<0.61	6.0	<0.54	<0.22	<0.32	<1.32
	12/4/2018	3.7	<0.3	<0.37	<0.34	<0.2	4.5	<0.61	9.0	<0.54	0.37 J	<0.32	<1.32
3/22/2019	21.5	<0.3	<0.37	<0.34	<0.2	3.5	<0.61	10.8	<0.54	<0.22	2.24	<1.32	
MW-2	7/14/2005	2.6	<0.15	<0.60	<0.60	<0.12	NLRA	NLRA	<0.5	<0.24	NLRA	<0.60	<0.40
	10/20/2005	11	0.76	<0.60	<0.60	<0.12	NLRA	NLRA	<0.50	<0.24	NLRA	<0.60	<0.40
	7/6/2007	3.9	<0.15	<0.40	<0.50	<0.15	NLRA	NLRA	<0.22	<0.30	NLRA	<0.40	<0.50
	10/30/2007	3.4	<0.15	<0.40	<0.50	<0.15	NLRA	<0.40	<0.22	0.44	NLRA	<0.40	<0.50
	10/4/2017	4.2	<0.45	<0.41	<0.35	<0.19	<0.31	<0.5	<0.96	<1.3	<0.45	<0.38	<0.94
	6/5/2018	1.35	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	9/6/2018	3.3	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	12/4/2018	0.49 J	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
3/21/2019	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32	
MW-3	7/14/2005	18	0.3	<0.60	<0.60	<0.12	NLRA	NLRA	<0.50	<0.24	NLRA	<0.60	<0.40
	10/20/2005	55	1.9	<1.2	<1.2	<0.24	NLRA	NLRA	<1.0	<0.48	NLRA	<1.2	<0.8
	7/6/2007	46	5.5	<0.40	<0.50	<0.15	NLRA	NLRA	<0.22	<0.30	NLRA	<0.40	<0.50
	10/30/2007	12	5.1	1.9	<0.50	<0.15	NLRA	<0.40	<0.22	0.34	NLRA	<0.40	<0.50
	10/4/2017	52	0.57 J	<0.41	<0.35	<0.19	<0.31	<0.5	<0.96	<1.3	<0.45	<0.38	<0.94
	6/6/2018	22.1	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	9/6/2018	0.47 J	1.13	0.68 J	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	12/4/2018	25.5	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
3/22/2019	31.6	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32	
MW-4	7/14/2005	140	2.1	<0.60	<0.60	<0.12	NLRA	NLRA	<0.50	<0.24	NLRA	<0.60	<0.40
	10/20/2005	750	26	<30	<30	<6.0	NLRA	NLRA	<25	<12	NLRA	<30	<20
	Dup 10/20/2005	720	35	<6.0	<6.0	<6.0	NLRA	NLRA	<5.0	<2.4	NLRA	<6.0	18
	7/6/2007	56	2.2	<0.40	<0.50	<0.15	NLRA	NLRA	<0.22	<0.30	NLRA	<0.40	<0.50
	10/30/2007	700	5.6	<8.0	<10	<3.0	NLRA	<8.0	<4.4	<6.0	NLRA	<8.0	<10
	10/4/2017	194	1.03 J	<0.41	<0.35	<0.19	2.0	<0.5	6.1	<1.3	<0.45	<0.38	<0.94
	Dup 10/4/2017	194	0.89 J	<0.41	<0.35	<0.19	1.98	<0.5	5.6	<1.3	<0.45	<0.38	<0.94
	6/6/2018	190	0.84 J	<0.37	<0.34	<0.2	2.54	<0.61	6.4	<0.54	0.60 J	<0.32	<1.32
	Dup 6/6/2018	189	1.1	<0.37	<0.34	<0.2	2.49	<0.61	5.9	0.63 J	0.62 J	<0.32	<1.32
	9/6/2018	205	1.17	<0.37	<0.34	<0.2	1.75	<0.31	3.5	<0.54	<0.22	<0.32	<1.32
12/4/2018	84	1.33	<0.37	<0.34	<0.2	2.29	<0.61	4.3	<0.54	<0.22	<0.32	<1.32	
3/22/2019	11.7	<0.3	<0.37	<0.34	<0.2	2.13	<0.61	8.0	<0.54	0.32 J	<0.32	<1.32	
MW-4P	7/14/2005	6.3	<0.15	<0.60	<0.60	<0.12	NLRA	NLRA	<0.50	<0.24	NLRA	<0.60	<0.40
	10/20/2005	39	0.26	<0.60	<0.60	<0.12	NLRA	NLRA	<0.50	<0.24	NLRA	<0.60	<0.40
	7/6/2007	0.53	<0.15	<0.40	<0.50	<0.15	NLRA	NLRA	<0.40	<0.30	NLRA	<0.40	<0.50
	10/30/2007	1.6	<0.15	<0.40	<0.50	<0.15	NLRA	<0.40	<0.40	<0.30	NLRA	<0.40	<0.50
	10/4/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<0.31	<0.5	<0.96	<1.3	<0.45	<0.38	<0.94
	6/6/2018	<0.38	<0.3	0.53 J	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	9/5/2018	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	12/4/2018	0.77 J	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
3/22/2019	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32	
MW-5	7/14/2005	87	0.71	<0.60	<0.60	<0.12	NLRA	NLRA	<0.50	<0.24	NLRA	<0.60	<0.40
	10/20/2005	190	2.8	<3.0	<3.0	<0.6	NLRA	NLRA	<2.5	<1.2	NLRA	<3.0	<2.0
	7/6/2007	110	0.95	<0.40	<0.50	<0.15	NLRA	NLRA	<0.22	<0.30	NLRA	<0.40	<0.50
	10/30/2007	300	2.3	<4.0	<5.0	<1.5	NLRA	<4.0	<2.2	<3.0	NLRA	<4.0	<5.0
	10/4/2017	60	0.68 J	<0.41	<0.35	<0.19	<0.31	<0.5	<0.96	<1.3	<0.45	<0.38	<0.94
	6/6/2018	52	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	9/6/2018	44	0.70 J	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	12/4/2018	50	0.50 J	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
3/22/2019	6.1	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32	

TABLE 5
MONITORING WELL SAMPLE ANALYTICAL RESULTS

Portage Cleaners
104 E. Wisconsin St., Portage, WI 53901

Monitoring Well Sample ID	Date Sampled	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride	Bromodichloromethane	Chloroethane	Chloroform	Chloromethane	Dibromochloromethane	Dichlorodifluoromethane	Methylene Chloride
		VOCs (µg/L)											
Enforcement Standard		5	5	70	100	0.2	0.6	400	6	3	60	1,000	5
Preventive Action Limit		0.5	0.5	7	20	0.02	0.06	80	0.6	0.3	6	200	0.5
MW-6	7/14/2005	2.9	0.82	<0.60	<0.60	0.76	NLRA	NLRA	<0.50	<0.24	NLRA	7.0	<0.40
	Dup 7/14/2005	1.6	0.71	<0.60	<0.60	0.41	NLRA	NLRA	<0.50	<0.24	NLRA	4.8	<0.40
	10/20/2005	6.6	5.3	0.84	<0.60	1.2	NLRA	NLRA	<0.50	<0.24	NLRA	12	<0.40
	7/6/2007	19	1.8	1	<0.50	0.16	NLRA	NLRA	<0.22	<0.30	NLRA	2.1	<0.50
	Dup 7/6/2007	14	1.5	1.1	<0.50	<0.15	NLRA	NLRA	<0.22	<0.30	NLRA	1.1	<0.50
	10/30/2007	11	2.1	1.1	<0.50	<0.15	NLRA	<0.40	<0.22	0.39	NLRA	1.8	<0.50
	11/13/2017	2.55	2.93	0.93 J	<0.35	<0.19	<0.31	<0.5	<0.96	<1.3	<0.45	1.97	<0.94
	6/6/2018	53	10.6	2.58	<0.34	0.29 J	<0.33	<0.61	1.7	0.60 J	<0.22	1.77	<1.32
	9/6/2018	47	12.6	3.6	<0.34	<0.2	<0.33	<0.61	1.82	<0.54	<0.22	1.63	<1.32
	12/4/2018	47	10.1	4.1	<0.34	<0.2	<0.33	<0.61	1.22	<0.54	<0.22	2.12	<1.32
3/22/2019	0.91 J	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32	
MW-7	7/14/2005	<0.40	<0.15	<0.60	<0.60	<0.12	NLRA	NLRA	<0.50	<0.24	NLRA	<0.60	<0.40
	10/20/2005	<0.40	<0.15	<0.60	<0.60	<0.12	NLRA	NLRA	<0.50	<0.24	NLRA	<0.60	<0.40
	7/6/2007	1	0.33	<0.40	<0.50	<0.15	NLRA	NLRA	<0.22	<0.30	NLRA	<0.40	<0.60
	10/30/2007	0.41	<0.15	<0.40	<0.50	<0.15	NLRA	<0.40	<0.22	0.56	NLRA	<0.40	<0.60
	10/4/2017	0.68 J	<0.45	<0.41	<0.35	<0.19	<0.31	<0.5	<0.96	<1.3	<0.45	<0.38	<0.94
	6/6/2018	0.46 J	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	9/5/2018	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	12/4/2018	0.39 J	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
3/21/2019	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32	
MW-8	7/6/2007	<0.40	<0.15	<0.40	<0.50	<0.15	NLRA	NLRA	<0.22	<0.30	NLRA	<0.40	<0.50
	10/30/2007	<0.40	<0.15	<0.40	<0.50	<0.15	NLRA	<0.40	<0.22	0.5	NLRA	<0.40	<0.50
	11/13/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<0.31	<0.5	<0.96	<1.3	<0.45	<0.38	<0.94
	6/5/2018	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	9/5/2018	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	12/3/2018	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	3/21/2019	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
MW-9	7/6/2007	1,400	16	150	<2.5	<0.75	NLRA	NLRA	<1.1	<1.5	NLRA	<2.0	4.5
	10/30/2007	1,300	22	120	<25	<7.5	NLRA	<20	<11	<15	NLRA	<20	<25
	Dup 10/30/2007	1,600	23	130	3.6	0.44	NLRA	<0.4	<0.22	0.36	NLRA	<0.40	<0.50
	10/5/2017	12.6	7.6	2.49	0.87 J	<0.19	<0.31	<0.5	<0.96	<1.3	<0.45	<0.38	<0.94
	6/5/2018	1.05 J	0.31 J	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	Dup 6/5/2018	1.11 J	0.43 J	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	9/6/2018	0.51 J	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	12/3/2018	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
3/21/2019	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32	
MW-10	7/6/2007	33	2.9	7.9	<0.50	<0.15	NLRA	NLRA	<0.22	<0.30	NLRA	<0.40	<0.50
	10/30/2007	13	4.6	9.8	<0.50	<0.15	NLRA	<0.40	<0.22	0.5	NLRA	<0.40	<0.50
	10/4/2017	11.3	1.3 J	5.2	<0.35	<0.19	<0.31	<0.5	<0.96	<1.3	<0.45	<0.38	<0.94
	6/5/2018	30.1	0.70 J	0.59 J	<0.34	<0.2	<0.33	<0.61	0.28 J	<0.54	<0.22	<0.32	<1.32
	9/6/2018	24.2	0.93 J	1.06 J	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	Dup 9/6/2018	27.4	0.79 J	0.93 J	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	12/3/2018	27.1	1.49	3.5	<0.34	<0.2	<0.33	<0.61	0.31 J	<0.54	<0.22	<0.32	<1.32
	3/21/2019	16.4	0.95	3.6	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
MW-10P	7/6/2007	4.3	15	24	1.5	<0.15	NLRA	NLRA	<0.22	<0.30	NLRA	<0.40	<0.50
	10/30/2007	3.9	17	18	1.5	<0.15	NLRA	<0.40	<0.22	<0.30	NLRA	<0.40	<0.50
	10/4/2017	0.48 J	<0.45	4.0	<0.35	<0.19	<0.31	<0.5	<0.96	<1.3	<0.45	<0.38	<0.94
	6/5/2018	<0.38	<0.3	1.45	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	9/5/2018	<0.38	<0.3	2.11	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	12/3/2018	<0.38	<0.3	4.6	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	3/21/2019	<0.38	<0.3	2.57	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
MW-11	6/6/2018	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	9/5/2018	<0.38	0.54 J	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	12/3/2018	<0.38	0.46 J	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32
	3/22/2019	<0.38	<0.3	<0.37	<0.34	<0.2	<0.33	<0.61	<0.26	<0.54	<0.22	<0.32	<1.32

Notes:

µg/L = micrograms per liter

Samples analyzed using EPA SW-846 Method 8260

VOCs = Volatile Organic Compounds

Bolded and orange shaded values are above Public Health Enforcement Standard

Bolded and blue shaded values are above Public Health Preventive Action Limit

Bolded values are above detection limits

Samples/constituents not shown are below laboratory reporting limits

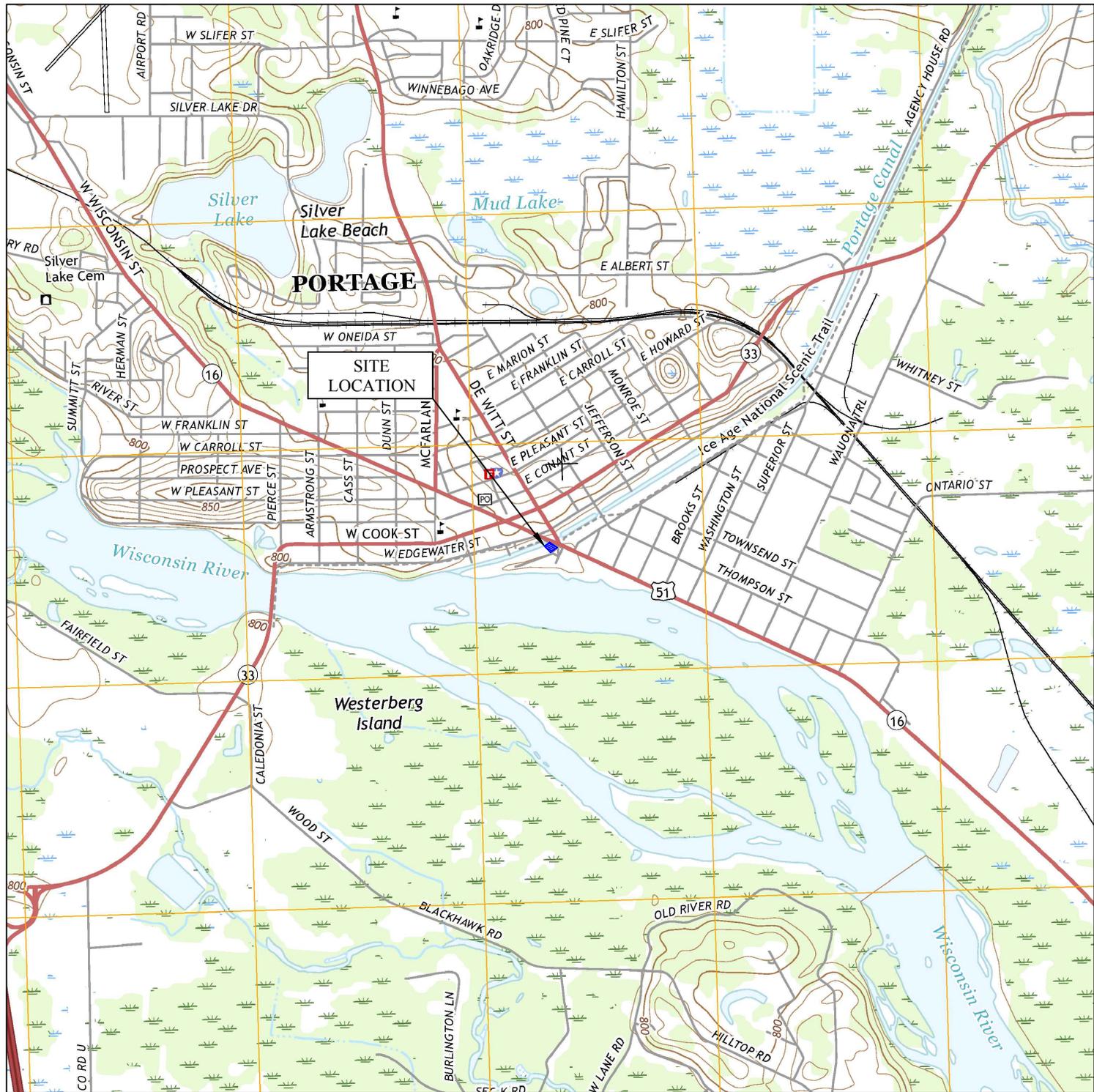
J = Analyte concentration detected between the laboratory Reporting Limit and the laboratory Method Detection Limit

NE = Not Established

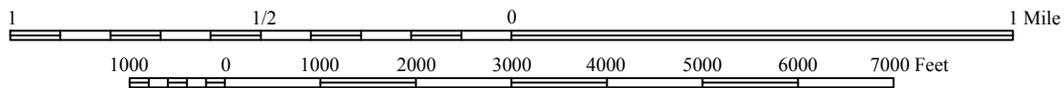
NLRA = No laboratory results available



FIGURES



Scale 1:24,000



Source: US Geological Survey, Portage, Wisconsin 7.5 Minute Series, 2016

No.	Date	Revision	Approved



Date: 11/8/17
 Designed: EB
 Drawn: EB
 Checked: RH
 DWG file: 6493-0182

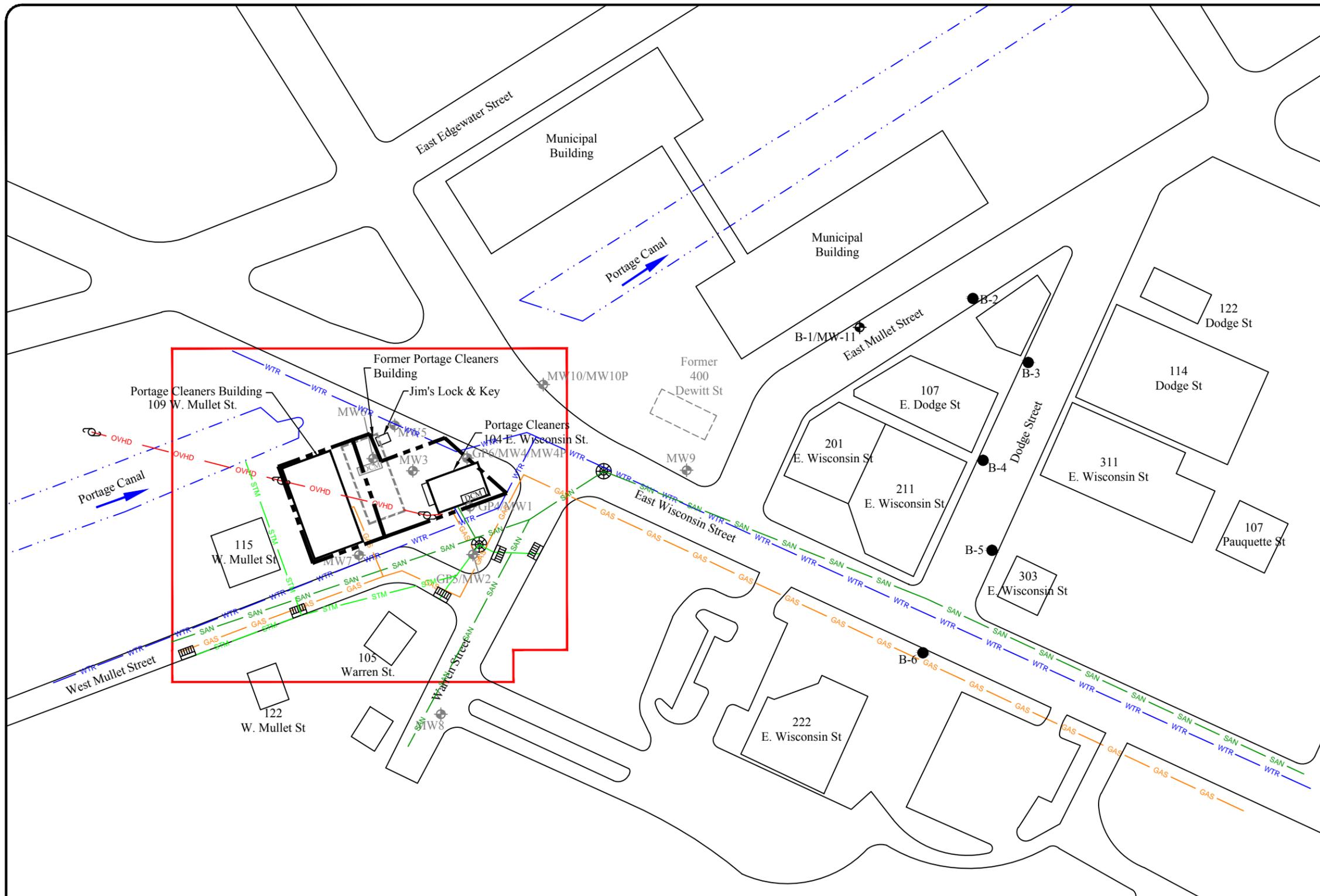
SITE TOPOGRAPHIC MAP

Portage Cleaners
 104 West Wisconsin Street
 Portage, Wisconsin

Figure
 1
 Project
 6493

Legend

-  Property boundary
-  SAN Underground sanitary utility line
-  WTR Underground water utility line
-  GAS Underground gas utility line
-  STM Underground storm utility line
-  OVHD Over head electrical utility line
-  Utility Pole
-  Catch Basin
-  Manhole
-  DCM Dry cleaning machine location
-  FDCM Former dry cleaning machine location
-  MW1 Monitoring well location (By Others)
-  MW-11 Monitoring well location
-  GP1 Soil boring location (By Others)
-  B-1 Direct push soil boring location
-  See detailed site plan (Figure 2b) for more sample locations due to sample density



Wisconsin River



APPROXIMATE SCALE: 1" = 100'

SITE PLAN

Portage Cleaners
104 East Wisconsin Street
Portage, Wisconsin

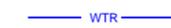
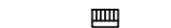
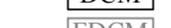
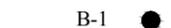
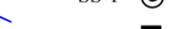
Date:	5/4/17
Designed:	EB
Drawn:	EB
Checked:	RH
DWG file:	6493-0046

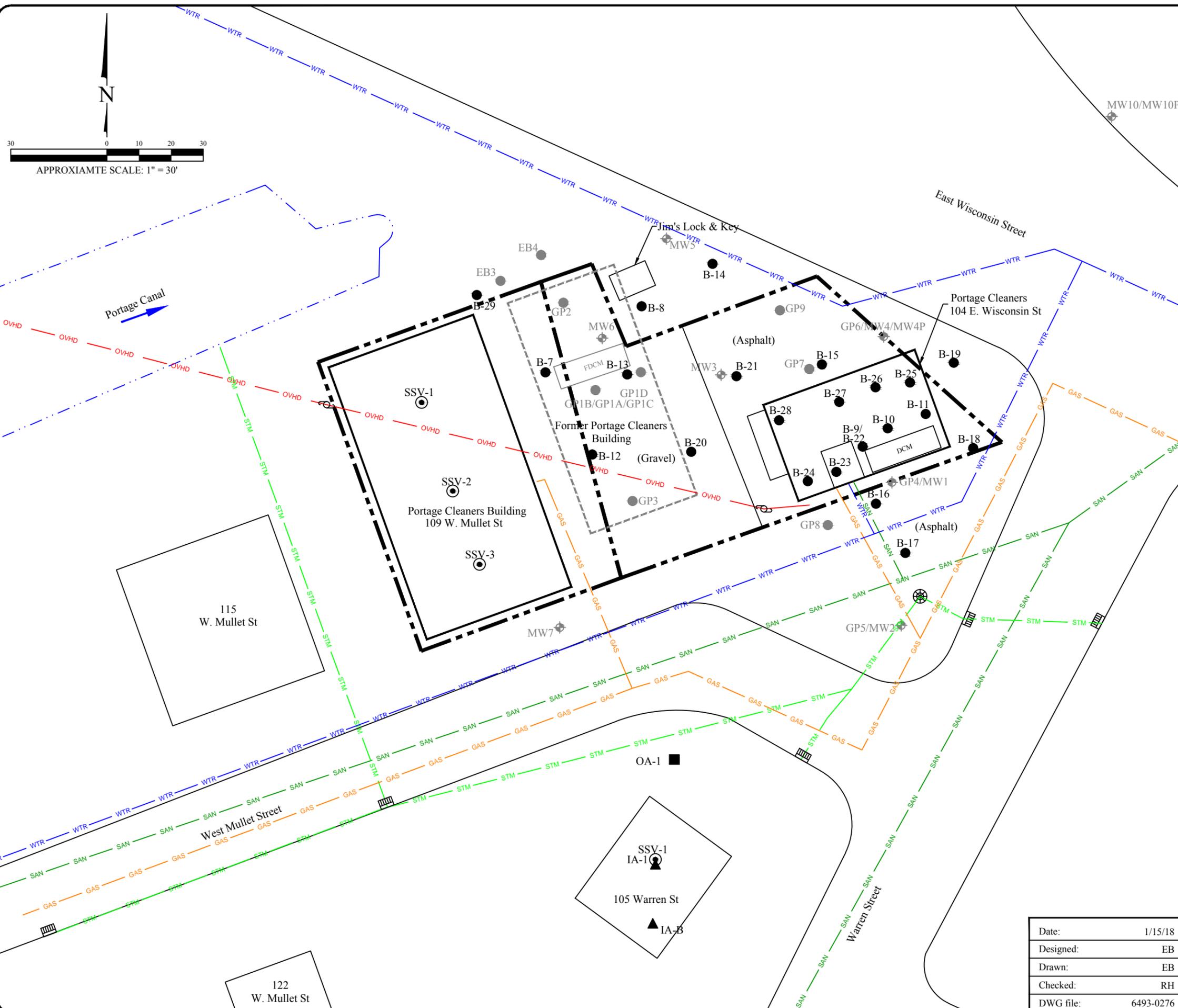


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Figure	
	2a
Project	
	6493

Legend

-  Property boundary
-  SAN Underground sanitary utility line
-  WTR Underground water utility line
-  GAS Underground gas utility line
-  STM Underground storm utility line
-  OVHD Over head electrical utility line
-  Utility Pole
-  Catch Basin
-  Manhole
-  DCM Dry cleaning machine location
-  FDCM Former dry cleaning machine location
-  MW1 Monitoring well location (By Others)
-  GP1 Soil boring location (By Others)
-  B-1 Direct push soil boring location
-  SS-1 Sub-slab sample location
-  OA-1 Outdoor air sample location
-  IA-1 Indoor air sample location



DETAILED SITE PLAN

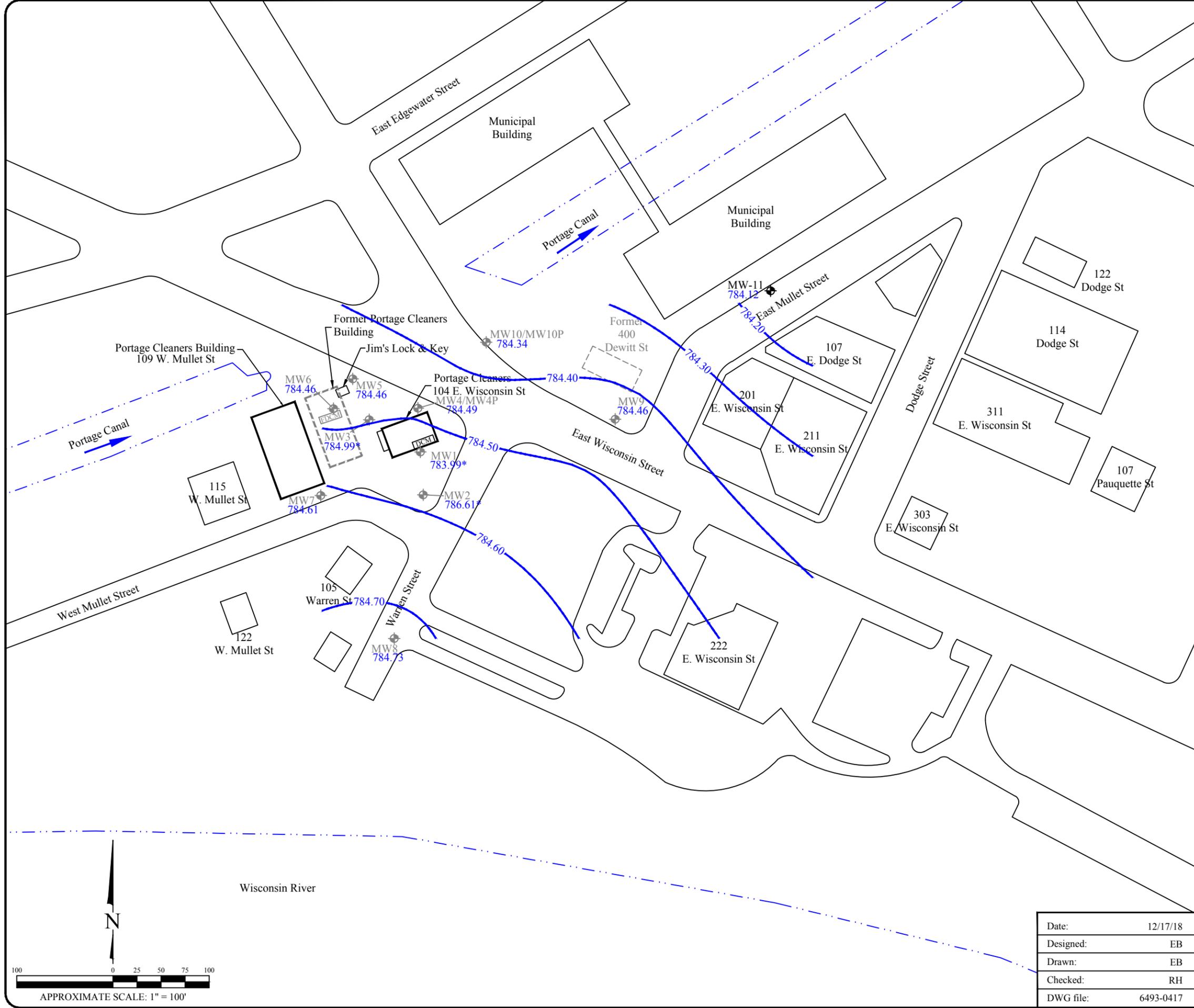
Portage Cleaners
104 East Wisconsin Street
Portage, Wisconsin

Date:	1/15/18
Designed:	EB
Drawn:	EB
Checked:	RH
DWG file:	6493-0276



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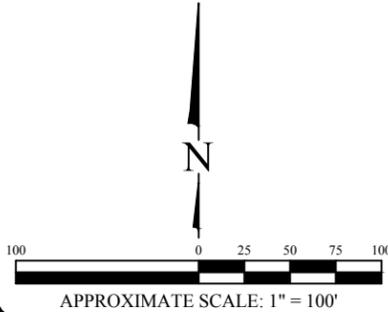
Figure	2b
Project	6493



Legend

- DCM Dry cleaning machine location
- FDCM Former dry cleaning machine location
- MW1 Monitoring well (By Others)
- MW-11 Monitoring well (EnviroForensics)
- 784.40 Groundwater elevation contour
- 784.49 Groundwater elevation (feet above mean sea level)

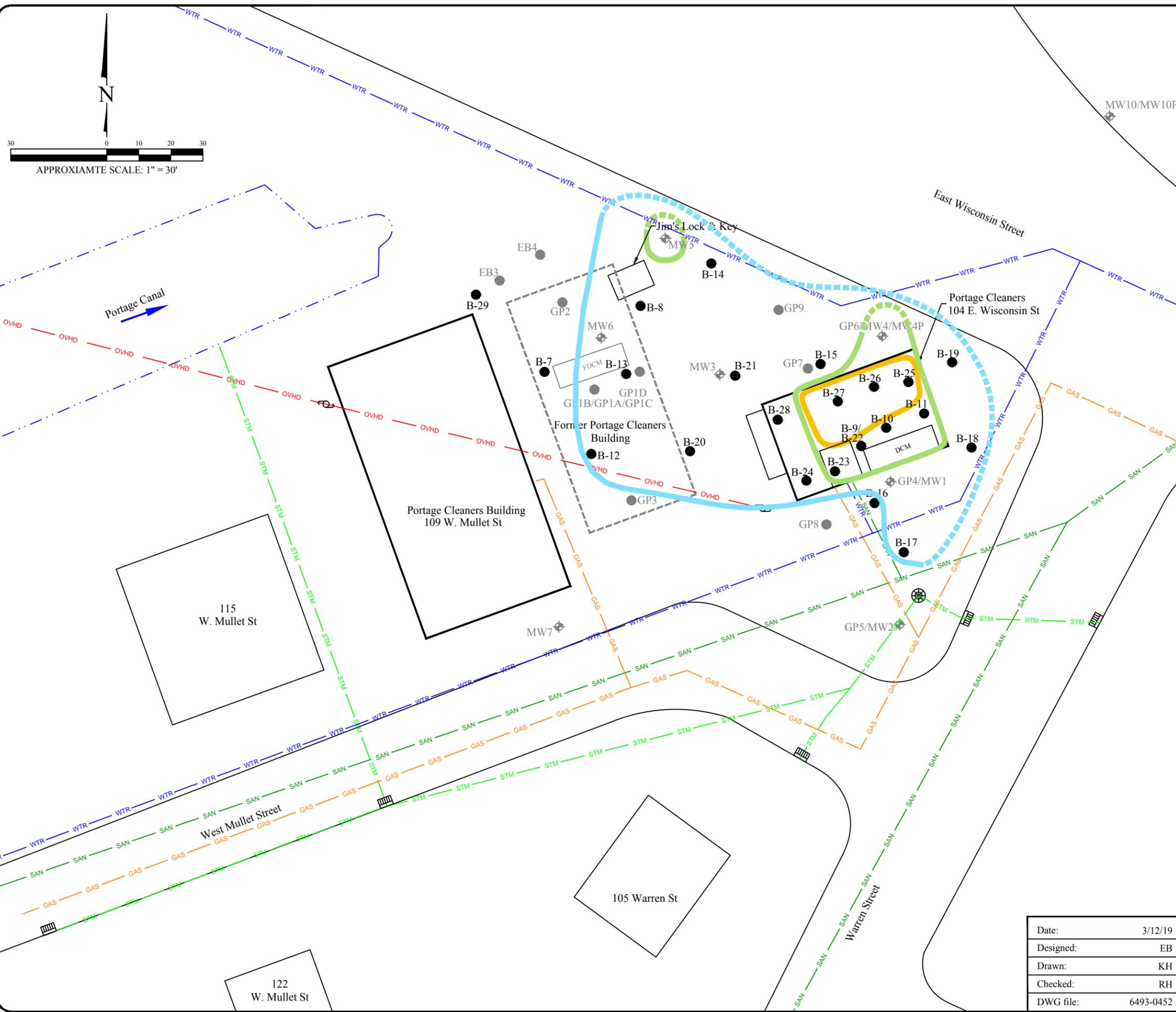
Note:
1. * = Not included during potentiometric surface interpretation



POTENTIOMETRIC SURFACE MAP DECEMBER 3, 2018 Portage Cleaners 104 East Wisconsin Street Portage, Wisconsin		Figure 3 Project 6493
Date: 12/17/18 Designed: EB Drawn: EB Checked: RH DWG file: 6493-0417	 825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com	

Legend

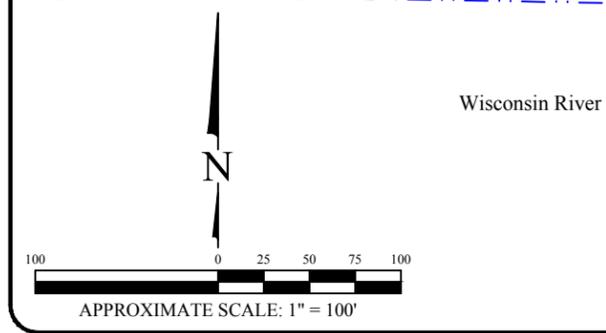
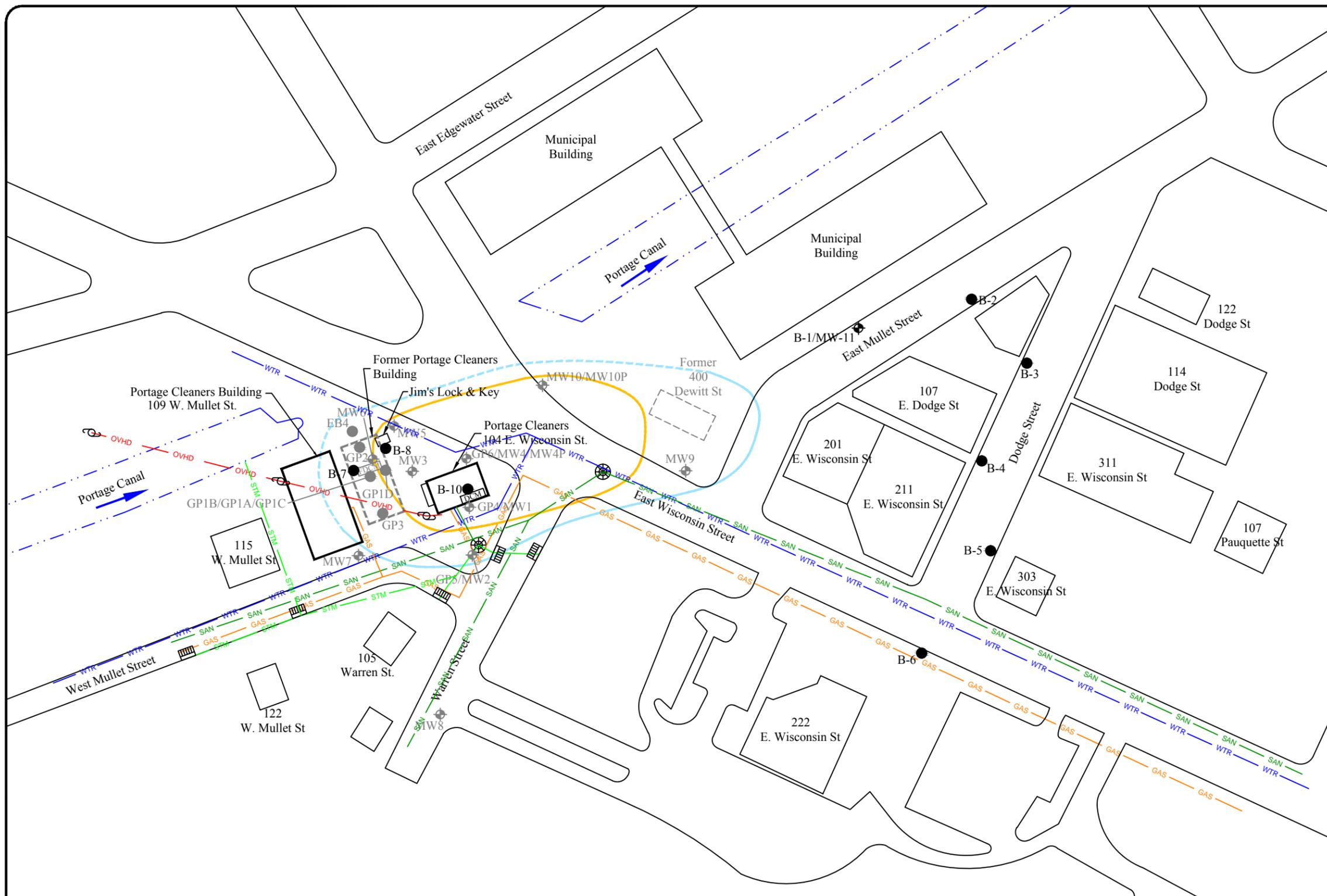
- GAS — Underground gas utility line
 - STM — Underground storm utility line
 - OVHD — Over head electrical utility line
 -  Utility Pole
 -  Catch Basin
 -  Manhole
 -  DCM Dry cleaning machine location
 -  FDCM Former dry cleaning machine location
 -  MW1 Monitoring well (By Others)
 -  GP1 Soil boring (By Others)
 -  MW1 Monitoring well
 -  B-1 Direct push soil boring
-
- PCE concentrations exceeding 1,000 ug/kg
 - PCE concentrations exceeding the Non-Industrial Residual Contaminant Level - 33,000 ug/kg
 - PCE concentrations exceeding the Industrial Residual Contaminant Level - 145,000 ug/kg



PCE SOIL ISOCONCENTRATION MAP																			
Portage Cleaners 104 East Wisconsin Street Portage, Wisconsin																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Date:</td><td>3/12/19</td></tr> <tr><td>Designed:</td><td>EB</td></tr> <tr><td>Drawn:</td><td>KH</td></tr> <tr><td>Checked:</td><td>RH</td></tr> <tr><td>DWG file:</td><td>6493-0452</td></tr> </table>	Date:	3/12/19	Designed:	EB	Drawn:	KH	Checked:	RH	DWG file:	6493-0452	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">Figure</td> </tr> <tr> <td style="text-align: center;">825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com</td> <td style="text-align: center;">4</td> </tr> <tr> <td></td> <td style="text-align: center;">Project</td> </tr> <tr> <td></td> <td style="text-align: center;">6493</td> </tr> </table>		Figure	825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com	4		Project		6493
Date:	3/12/19																		
Designed:	EB																		
Drawn:	KH																		
Checked:	RH																		
DWG file:	6493-0452																		
	Figure																		
825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com	4																		
	Project																		
	6493																		

Legend

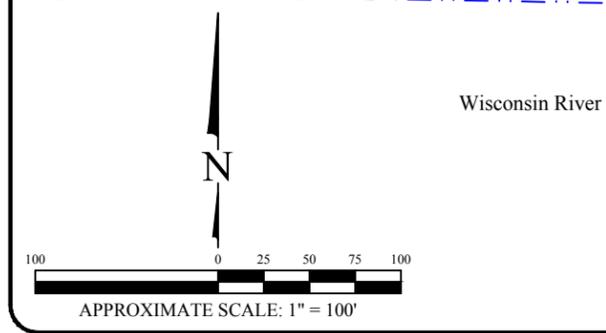
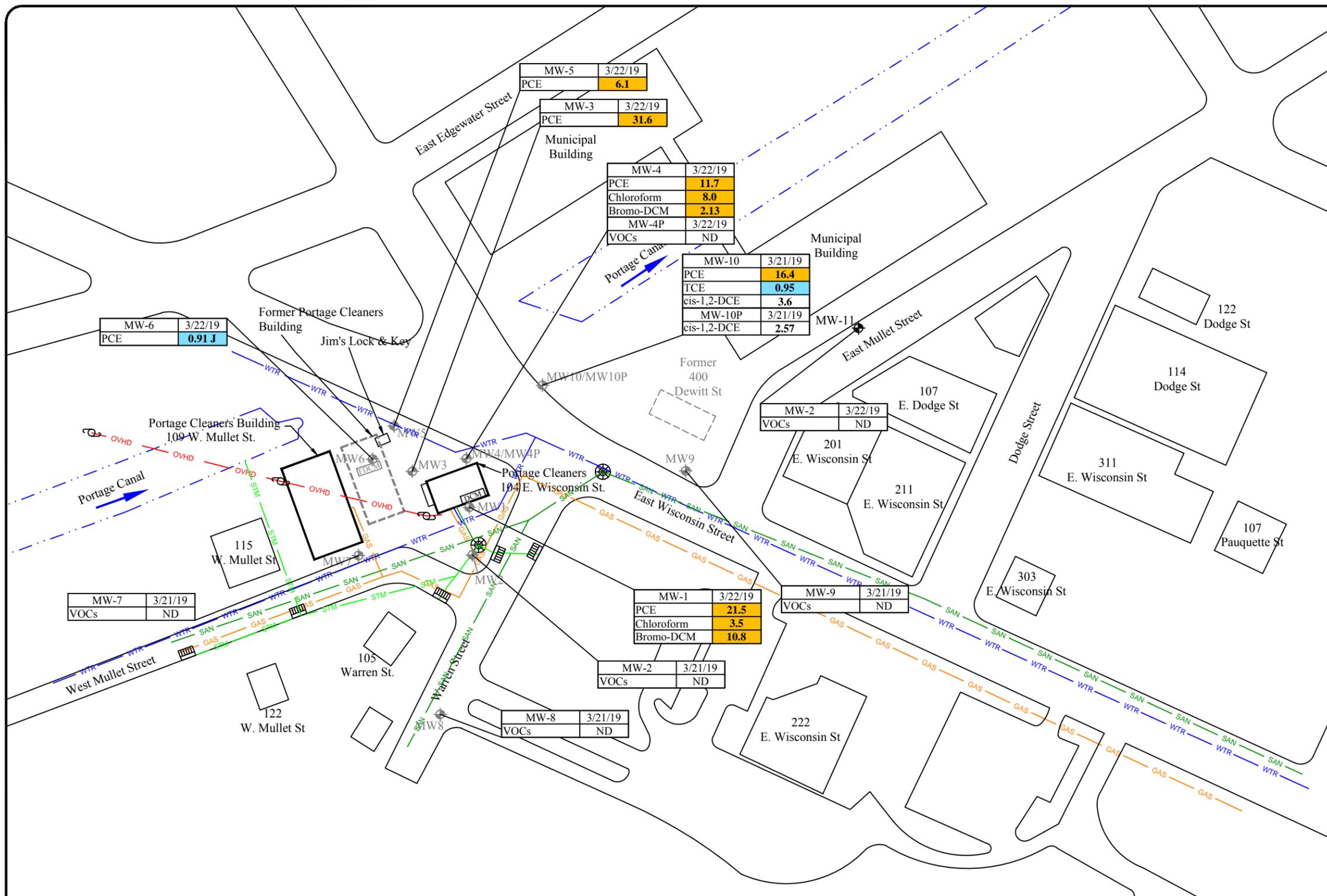
- SAN — Underground sanitary utility line
- WTR — Underground water utility line
- GAS — Underground gas utility line
- STM — Underground storm utility line
- OVHD — Over head electrical utility line
-  Utility Pole
-  Catch Basin
-  Manhole
- DCM Dry cleaning machine location
- FDCM Former dry cleaning machine location
- MW1  Monitoring well location (By Others)
- GP1  Grab groundwater location (By Others)
- MW-11  Monitoring well location
- B-1  Grab Groundwater Location
- PCE concentration exceeding Enforcement Standard
- PCE concentration exceeding Preventive Action Limit



PCE GROUNDWATER ISOCONCENTRATION MAP Portage Cleaners 104 East Wisconsin Street Portage, Wisconsin																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Date:</td><td>8/23/18</td></tr> <tr><td>Designed:</td><td>EB</td></tr> <tr><td>Drawn:</td><td>EB</td></tr> <tr><td>Checked:</td><td>RH</td></tr> <tr><td>DWG file:</td><td>6493-0371</td></tr> </table>	Date:	8/23/18	Designed:	EB	Drawn:	EB	Checked:	RH	DWG file:	6493-0371	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">Figure</td> </tr> <tr> <td style="text-align: center;">825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com</td> <td style="text-align: center;">5</td> </tr> <tr> <td></td> <td style="text-align: center;">Project</td> </tr> <tr> <td></td> <td style="text-align: center;">6493</td> </tr> </table>		Figure	825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com	5		Project		6493
Date:	8/23/18																		
Designed:	EB																		
Drawn:	EB																		
Checked:	RH																		
DWG file:	6493-0371																		
	Figure																		
825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com	5																		
	Project																		
	6493																		

Legend

- SAN — Underground sanitary utility line
- WTR — Underground water utility line
- GAS — Underground gas utility line
- STM — Underground storm utility line
- OVHD — Over head electrical utility line
-  Utility Pole
-  Catch Basin
-  Manhole
-  DCM Dry cleaning machine location
-  FDCM Former dry cleaning machine location
-  MW1 Monitoring well location (By Others)
-  MW11 Monitoring well location



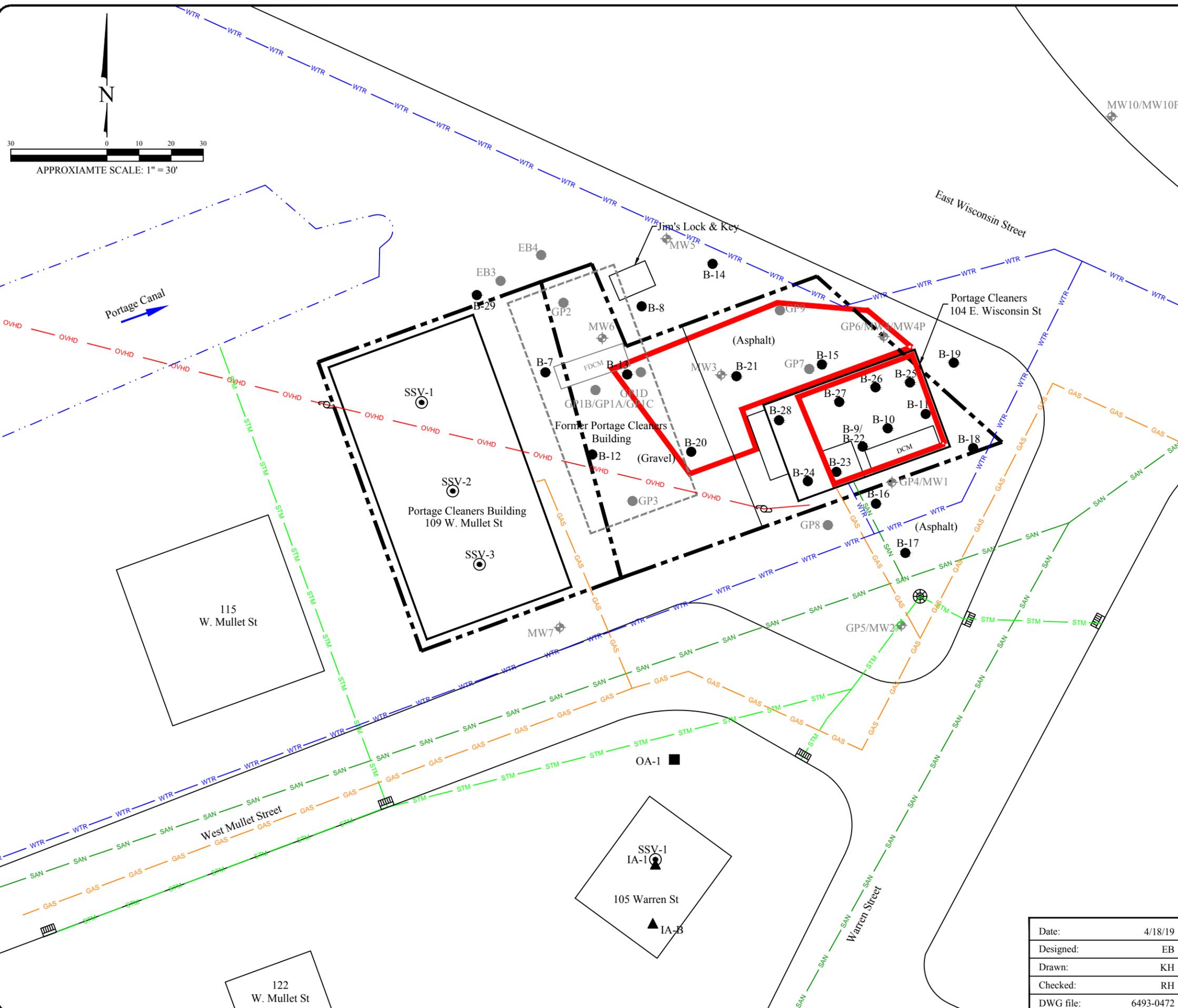
MONITORING WELL GROUNDWATER ANALYTICAL RESULTS MAP

Portage Cleaners
104 East Wisconsin Street
Portage, Wisconsin

Date:	4/9/19		Figure	
Designed:	EB		6	
Drawn:	KH		Project	
Checked:	RH		6493	
DWG file:	6493-0468		825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com	

Legend

-  Property boundary
-  SAN Underground sanitary utility line
-  WTR Underground water utility line
-  GAS Underground gas utility line
-  STM Underground storm utility line
-  OVHD Over head electrical utility line
-  Utility Pole
-  Catch Basin
-  Manhole
-  DCM Dry cleaning machine location
-  FDCM Former dry cleaning machine location
-  MW1 Monitoring well location (By Others)
-  GP1 Soil boring location (By Others)
-  B-1 Direct push soil boring location
-  Proposed area for excavation



PROPOSED AREAS FOR EXCAVATION

Portage Cleaners
104 East Wisconsin Street
Portage, Wisconsin

Date:	4/18/19
Designed:	EB
Drawn:	KH
Checked:	RH
DWG file:	6493-0472



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Figure	7
Project	6493